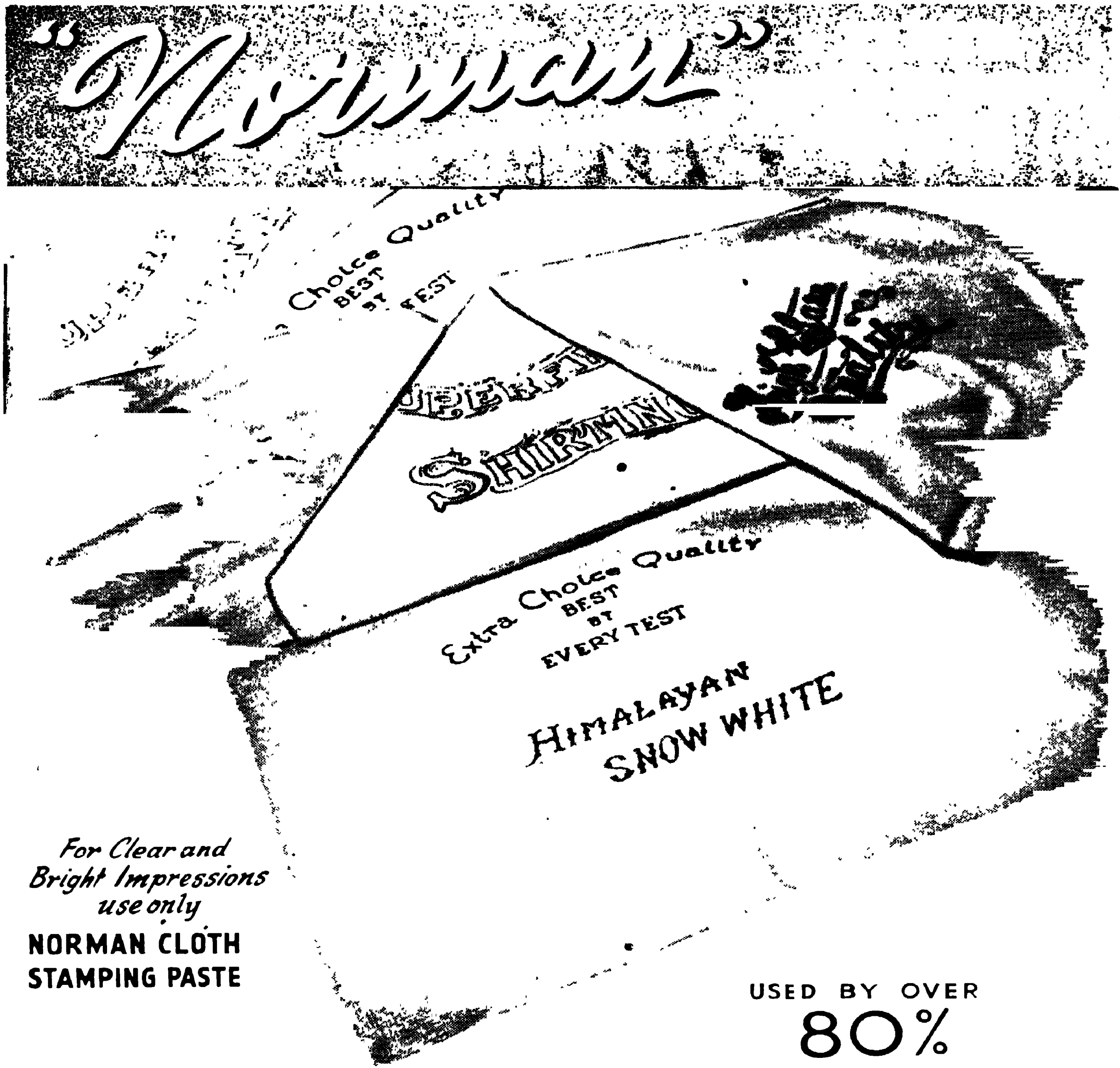

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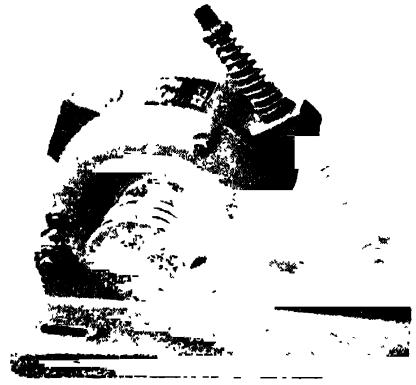

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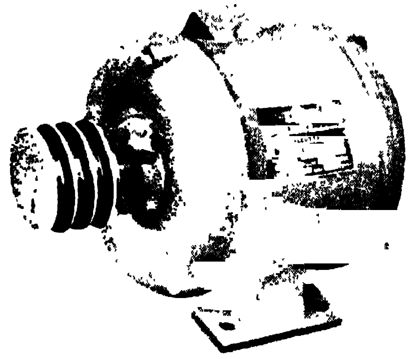

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We venture to take up the task of promoting the cause of the manufacturers of Indian Textiles as well as focussing the real problems confronting the Indian Textile Industry. Opinions expressed in this volume by our contributors touching the various spheres of the textile world will definitely help the textile traders and also our Government who is persuing a policy closely akin to our advocated measures.

We are thankful to our advertisers for their prompt co-operation in this joint effort and we are confident that their advertisements in this volume will fetch for them expected returns.

We are indebted to our contributors for their thought provoking articles upon various branches of the textile industry. It is hoped that in bringing our next number we shall receive the same amount of patronisation for them.

Keeping before our eyes a bright picture of the Indian Textiles we place this volume to all concerned with the industry and invite suggestions from all quarters so that we may serve the great cause in a better way.

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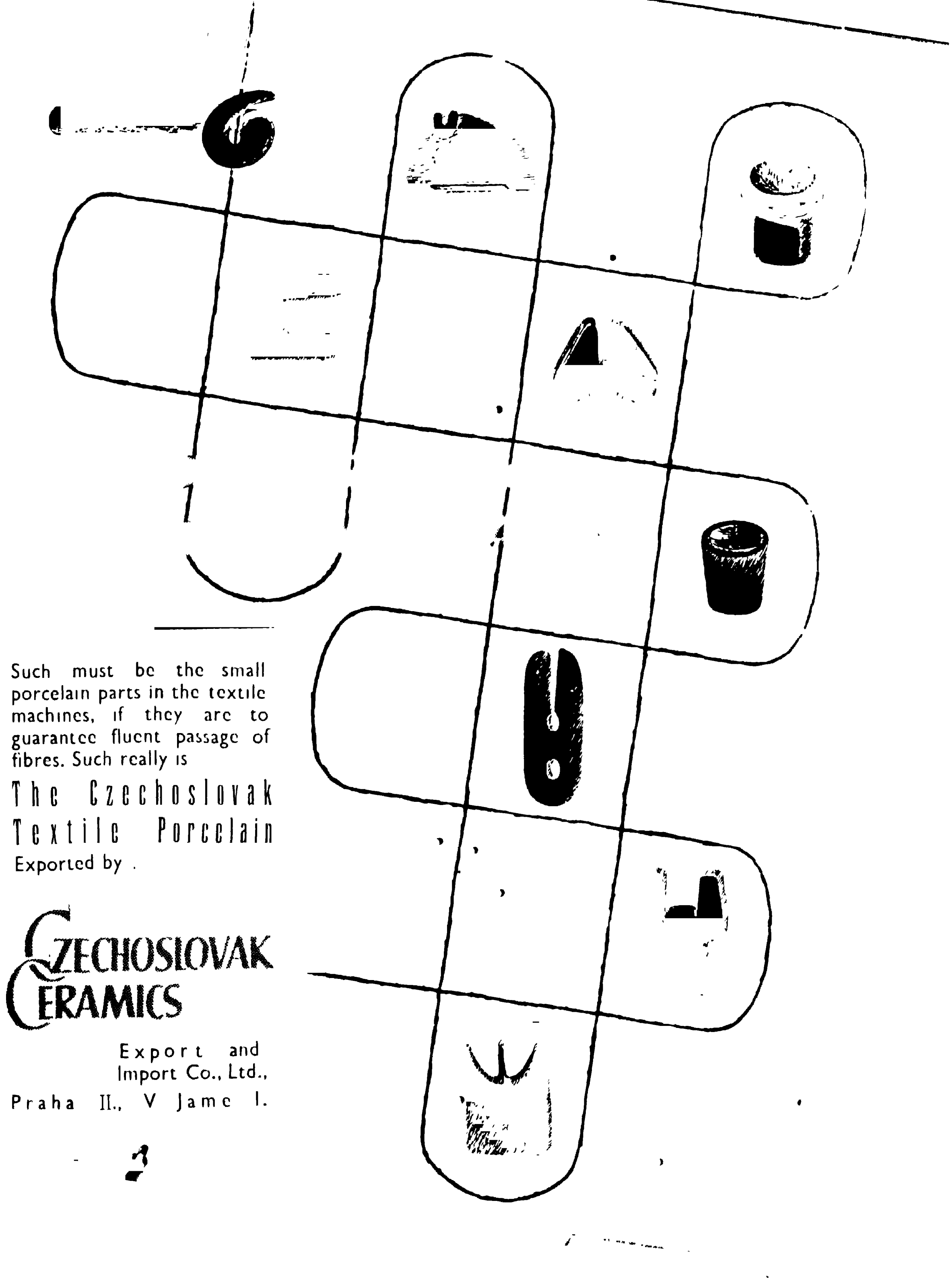

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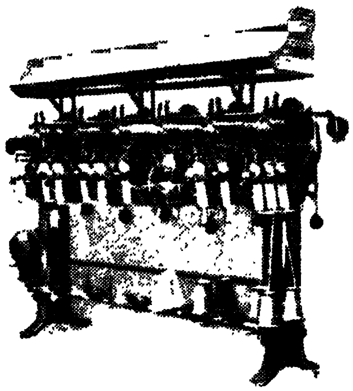

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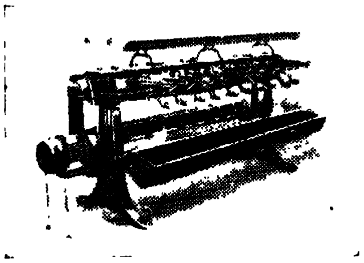

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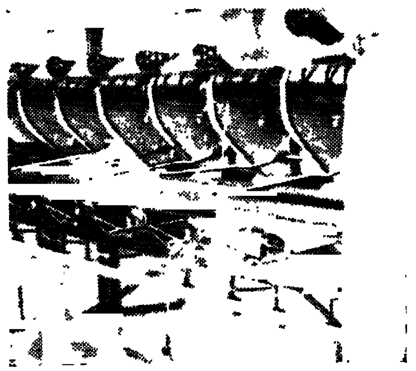

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Content

Editorial 1
The Cotton Textile Industry In India 7
Twist In Cotton Yarns 13
The Application of Colourless Fluorescent Dyes 19
Jute—The Money Crop 29
Trading in Golden Fibre 33
Silk Industry 37
Versatility of Britain's Synthetic Fibres 41
Flax Industry 45
Textile Processing Industry and its need 49
Modern Methods of Cone Winding and Loom Bobbin
Winding with Automatic machinery 53
Textile Lubrication and Economy 61
Automatic Loom 65
Planned Lighting in the Textile Industry 69
Power Transmission Hair Beltings Manufactured in India 77
Manufacture of Sewing Machines 81
Air Conditioning in Cotton Textile Mills 85
Woollen Textiles in India 89
Power Transmission 95
The new move in Labour Welfare 97
Textile Tit-Bits 101

Part II, Sec. "A" (Statistical & General)

A Bird's eye view of Cotton Textile Industry in India 107
Acreage Under Cotton Cultivation and Cotton Produced
during the year 1950-51 & 51-52 109
Import of Foreign Cotton in Bombay from 1st Sept, 1951
to 13th June, 1952 with the Corresponding period
of last season 109
Cotton Prices 110
Characteristics of Pakistan Cotton 110
Characteristics of Indian Cotton 111
Statement showing the quantity of yarns spun in India 112
Characteristics of Different types of Cotton produced in
different countries 113
Production & Consumption of raw Cotton in Indian
Union 115
Statement showing the stocks of cotton held by Indian
Mills on 1st. Aug/51 & 1st Feb/52 116

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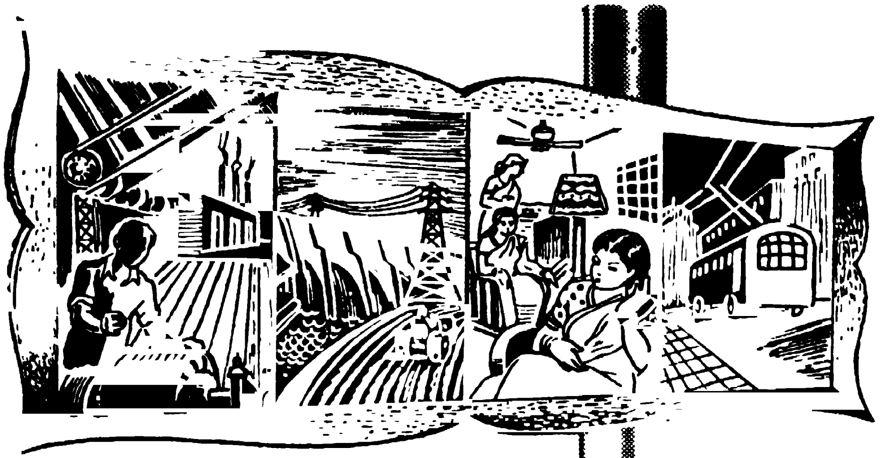

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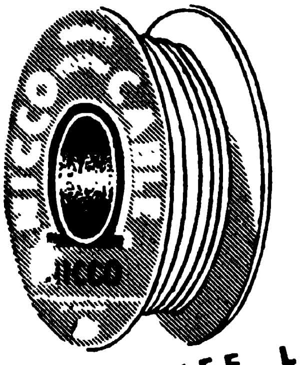

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Contents (continuation)

Import of Cotton Yarn into India ... 117
Spindles & Looms set up in India, the United States of America, Great Britain, Germany, Japan & China ... 119
Different types of fabrics & their Typical Quality particulars ... 121
Statement Showing the various classes of piecegoods imported into India . 125
Detailed Statement of the Quantity & Description of Woven Goods produced in Indian Mills ... 128
Summary of Imports of Cotton Yarn into India ... 129
Progress of Cotton Mill Industry in India ... 131
Cotton Yarn Table . . 133
Table Showing Varieties of Card Clothing Commonly used ... 139
Breaking Weights of Carded Warp Yarns ... 141
Purpose of humidity in Cotton Spinning 145

Part II, Sec. "B" (Directory)

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West Bengal Three
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Contents (continuation)

Bombay Presidency	Sixteen
Deccan	Thirtythree
Madras	Thirtythree
Madhya Bharat	Fortyone
Madhya Pradesh	Fortythree
Mysore	Fortyfive
East Punjab	Fortyseven
Pondicherry	Fortyeight
Rajasthan, Ajmer & Pepsu	Fortyeight
Travancore & Cochin	Fortynine
Uttar Pradesh	Fifty
FLAX & LINEN MILL	Fiftythree
JUTE MILLS IN INDIA	Fiftyfive
SILK & RAYON MILLS IN INDIA	Sixtythree
WOOLLEN & WORSTED MILLS IN INDIA	Eightythree
List of Mills which have started working under the Post-war Planned Scheme	Eightyfive
List of the Members of the Association of Merchants & Manufacturers of Textile Stores & Machinery, India	Ninetyone
List of Indigenous Manufacturers of Bobbins	Onehundredfive
List of the Members of All India Jute Mill Bobbin Manufacturers Association	Onehundrednine
Calico Printing Mills in India	Onehundredeleven
Calico Printing Factories in India	Onehundredtwelve
List of the Members of All India Starch Manufacturers Association	Onehundredfourteen

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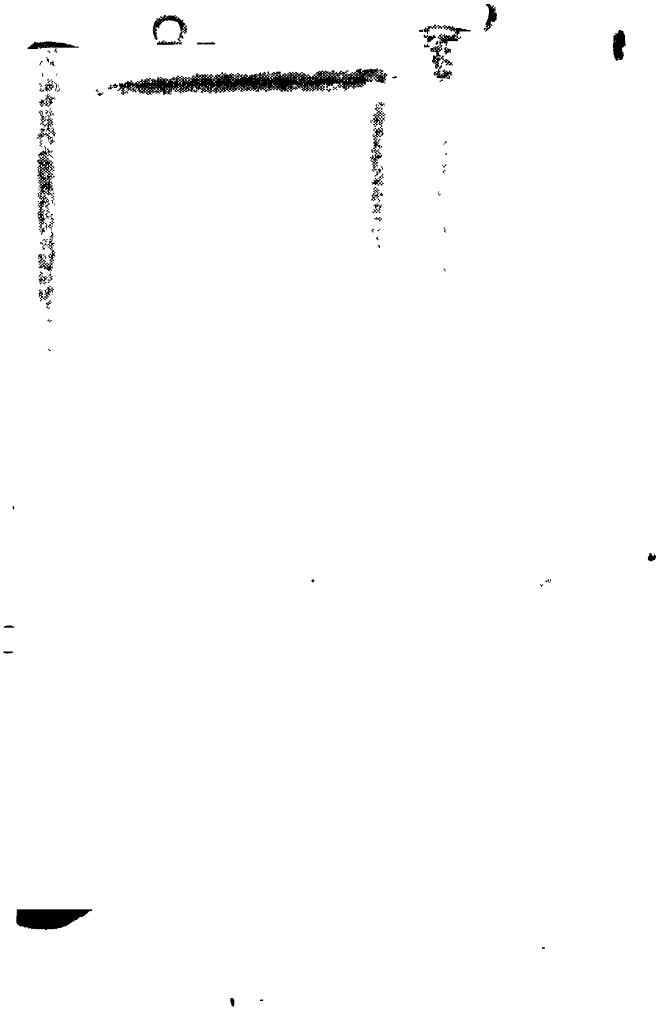

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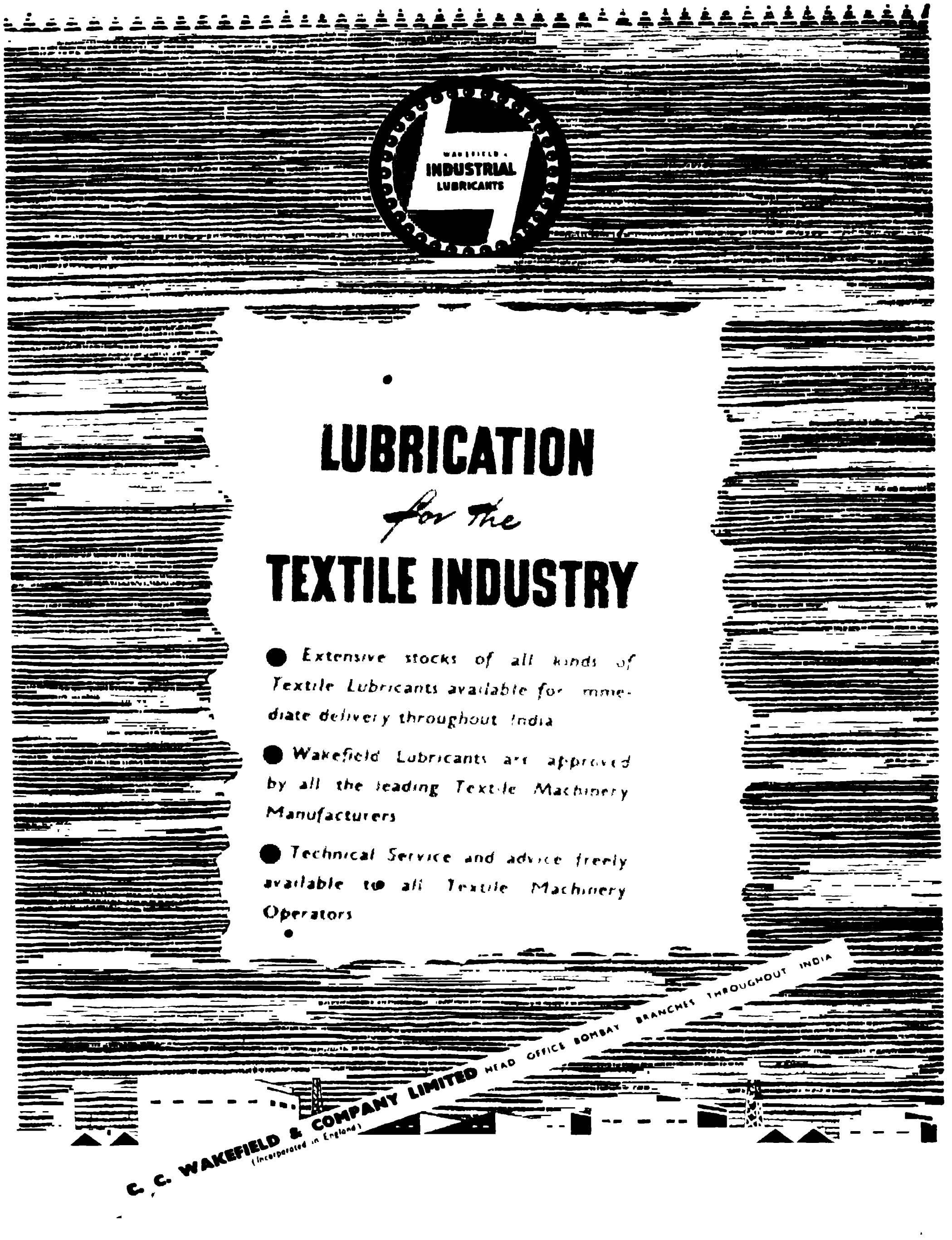

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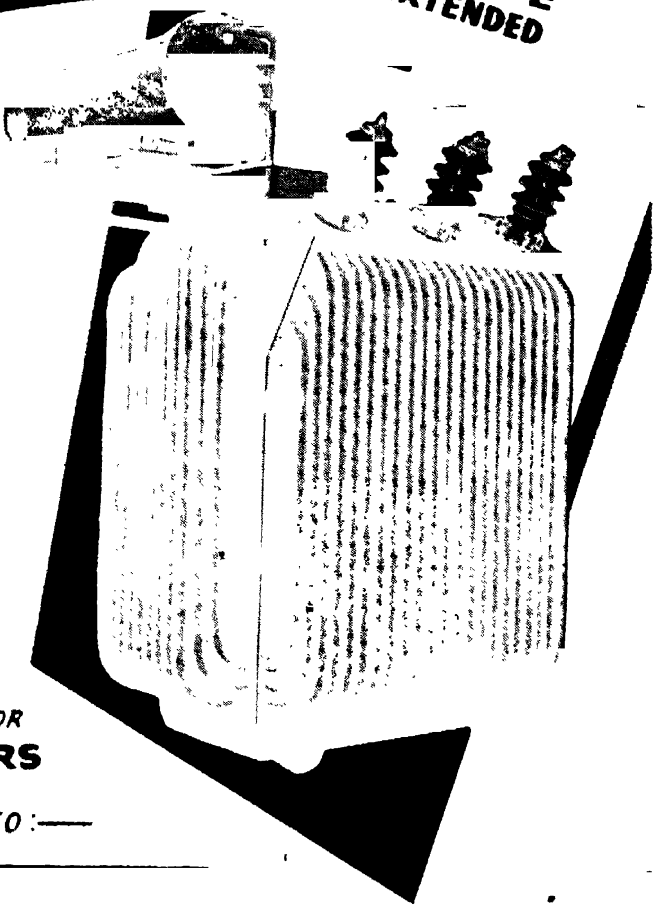

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EDITORIAL

INDIA'S pristine leadership in the manufacture of textiles has now become legendery and one has to begin the history of Indian Textiles with the heading 'Old stories retold'. The earliest authentic reference dates back to 450 B.C. when Herodotus testified that "India had wild trees that bore fleeces as their fruit......of these the Indians made their clothes". Further testimonials are from the works of Roman historian Pliny (A.D 73) and Marco Polo, which speak emphatically the unrivalled position of India as the repository of the Oriental textiles.

The history of Indian Textiles reads more like a history of a nation striving for political independence No doubt, it had been fundamental to the economy of this country in the past. It's present role in this country's economy is ever more important, for the Indian Textile Industry is called upon to play a vital role in the Country's international trade and expected to contribute maximum resources to our foreign exchange position.

Cotton Textiles

As regards Cotton Textiles, we must, before deciding the quantity which should be made available for export, as is expected in a Welfare State, ensure clothing to cover the nakedness of our teeming millions. The 1951 census figure puts India's population, excluding Jammu and Kashmir and tribal areas of Assam, at 356.98 millions. In 1941 it was 314.83 millions and in 1931 the figure read 275.52 millions. The rate of increase, if allowed to continue, will help to present 377.89 million people in this subcontinent by 1956. Now, with 445 complete spinning and weaving mills, with 11,240,635 spindles and 201,484 looms installed (a small percentage is not actually at work) we can reasonably estimate the production figure at 3,900 million yards by mills. To this figure 1.200 million yards by hand loom industries may be added. Taking it for granted that the minimum requirement is 20 yards per capita, we still need about 2,500 million yards for our domestic consumption.

Well, we are not supposed to be depressed on these accounts. Rather it will be illuminating to note the rapid development achieved by the Indian entrepreneours against heavy odds since 1851 when Mr. Cawasji Davar laid the foundation for this lucrative as well as essential industry in establishing a company, more in the line of present day joint stock company deriving it's capital from public subscription, which ultimately took shape as the Bombay Spinning Mills. and started working in 1856 The birth of this new 'baby' was surely not looked with favour by the then foreign masters whose politics were affected by the rise of factory-owning capitalists in their own country and by the need of larger markets—in short, by the economic changes resulting from the Industrial Revolution. The march of events since then characterises crisis after crisis in the Indian Cotton Textile Industry. Indian merchants had to wage continuous struggle against their more mechanised and powerful competitors from the West. At last the cause of Indian Textiles was taken up by our national leaders and Indian cloth became the badge of the nationalists whose slogan was 'Boycott Lancashire goods'

With the emergence of Japan as a potential competitor in cotton textiles the growth of Indian enterprises were further checked. The Japanese manufacturers with magnificient organisation created headache to the textile traders all over the world. All sorts of possible limitations were set against Japan to check the ruthless dumping policy in her export market. The story might have been otherwise had not the

World War II blitzed her textile mills and made her lose large number of mills she ran in China.

However the World Wars gave encouraging impetus to our industrialists and by 1946 we had 423 mills functioning in our country In the quinquennial period after independence, cotton textiles, in spite of the repercussions of the partition of the country, whereby most of the superior quality cotton acreages went to Pakistan, became the mainstay for India for her Middle East and Far East markets. But the scene is beginning to change with the reappearence of Japan. Moreover, Pakistan which had a loomage of 4,824 and spindleage of 177,418 at the time of partition, has since increased them to 5,330 and 315,000 respectively. In Burma, a State Enterprise consisting of 20,000 spindles and 200 looms has started working.

How these developments have affected India's exports of cotton textile adversely, may be well judged from the following table

India's Export of Cotton piecegoods to some Asian countries.

In crores of rupees.

COUNTRIES	1950-51	1951-52
Ceylon	4.89	1.10
Pakistan	4.65	3.29
Burma	12.46	1.53
Singapur	24.59	6.17
Malaya	2.50	00.58
Hong Kong	2.23	00.67
Thailand	1.31	00.31
Iran	3.46	2.63
Iraq	2.15	00.18
Aden and Dependencies	5.82	2.95

In these circumstances India should explore new avenues for her export trade through her trade representatives abroad.

As already stated, production of more cotton yards is the prime need of the hour. The most essential factor capable to ensure sufficient incentive to the producers—effective demand—is always present in the market. But so long as there is shortage of cotton we cannot expect to clad this poor country fully with cheap and plenty clothings. If the country is unable to produce adequate cotton to satisfy her mills imports are to be made. The country will have to see that the Cotton Textile Industry does not only meet her internal demand but is also in a position to make commendable earning in terms of Sterling and Dollar, to build her economy in International market. But with imported cotton it is very difficult to compete favourably with the countries like Japan, U K and U.S A

Our requirements in order to make the Cotton Textile Industry self-sufficient are (1) to give priority to the improvement and development in the growth and production of staple fibre cotton in India, (2) to promote manufacture in India of textile machineries and consumable stores—of which a commencement has already been made, (3) to promote techincal progress in all the allied branches of the industry as a condition for a powerful increase of production and a rise in the productivity of labour, which will necessitate not only catching up with but surpassing scientific achievements outside India in the near future, (4) to encourage erection of further spinning and weaving mills—some 19 new mills, with a capacity of 164,900 spindles and 800 looms are in course of erection, (5) to remove Government controls, which at present exist on the selling prices, production and distribution of cloth and yarn, (6) to remove excise duties which weigh heavily especially on the consumer of the superfine goods, (7) to strengthen the currency and improve credit arrangements in this national industry, (8) to induce business organisations to pay greater attention to mobilising their internal resources and observing scrupulous economy and resolutely eliminating losses due to bad management and unproductive expenditure, (10) to increase the proportion of wage rates for the fulfilment and over fulfilment of the output programmes in the total earnings of workers and clerical employees, (11) to rehabilitate and develop plants of existing mills which are slowly taking place at present.

Under the draft Five Year Plan of the Government of India, 137 crores will be spent on Agriculture alone and with the increased output of cotton the Cotton Textile Industry will be in a position to produce 4.500 million yards of cloth and the Handloom Industry 1900 million yards With these resources it is expected that the per capita consumption of cloth in 1955-56 will be about 15 yards (allowing for exports of about 600-700 million yards) Thus it may be concluded unhesitatingly that given the condition of sound purchasing power of the people the Cotton Textile Industry can be optimistic of its flourishing future and industrialists in this sphere of trade should concentrate their investment more upon improving their method of production

The Handloom Industry

India's progress in textiles is also dependable on the improvements attainable in the handloom industry which in the past not only satisfied our domestic demands but also enhanced the reputation of Oriental goods for highly ornamental designs worked with skilful precision on cotton and silk goods With the advancement of machineries, and also for the growing sartorial habits of the people, the handloom weavers began to see their dark days Government intervention to save this industry from complete disappearence had to be made Now in some particular fields of manufactures of textiles handloom industry enjoys reservation, for instance, the mill industry can no longer produce certain types of dhoties and saris, lungis and sarongs chaddars, sheets, gauze cloth, bandage cloth, dusters, napkins etc Moreover no excise duties are charged on handloom goods and these can be freely exported It seems that the Government is fully conscious regarding the amount of care this industry, spread throughout India, should receive The Planning Commission in its report published in July 1951 shows great concern for the cottage industries and it is expected that the hazards now experienced will be overcome in the near future provided the Five Year Plan is implemented with fervent zeal What we really need at this juncture and expect from the Government is (a) regularisation of the supply and distribution of yarn at reasonable prices, (b) financial assistance for schemes of developments and encouragement of the co-operative organisation of weavers and (c) marketing of their goods.

Jute

Our potential dollar earning commodity is Jute and Jute goods This industry experienced the worst possible repurcussion of the partition of this sub-continent and uptill now has not totally recovered from the hard hit. But, at least, the air of pessimism that filled the atmosphere of Jute trading now seems to be clearing away. Now it is felt that the Indian Jute Mill Industry has been saved from a great disaster

After partition the production was only 1 7 million bales from an acreage of 650,000 Our requirements are estimated at 6 million bales. The Planning Commission has fixed the target of 5,300,000 bales of raw jute Through a concerted move, our production in 1952 reached 4 8 million bales from an acreage of about 2 millions It would be seen from our present progress that the fixed target can be reached much before 1955-56. Thus our first and foremost difficulty—shortage of raw jute—can be overcome with a little more action in the near future.

Our second obstacle on our way to flourish with the industry is not internal It is generally believed that the price of jute has soared to a very high level after the war and due to this Jute and jute goods will be driven out of the market by some substitutes in course of time. In this connection it will not be out of place to observe that this rise is only a part of world wide increase of price of costs in post war period. Obviously, by this contention the threat from substitutes is not minimised We admit that there is room for substitutes But jute is simply irreplaceable for great many types of packaging There simply is no substitute threat for jute and the world with growing international movements of commodities and manufactures must have its jute. So for increased production of jute and jute goods, ever expanding market is ensured.

In crder to meet this growing market out prime need is to increase the supply of raw jute. For this we cannot afford to place much land for cultivation of jute as we are already in the maw of the 'food scarcity devil'. The only way open is to increase the yield per acre of jute by the distribution of good quality seeds; distribution of fertilizers; and controling diseases and pests of the jute plant. Steps should also be taken to ensure incentives to the cultivators.

It remains only to be hoped that the problems of the Indian Textile Industry, the largest organised industry in the country, will be properly understood and practical and scientific solutions evolved which will help to retain and enhance for the industry potentiality and prestige which were secured in the past with energatic and organised efforts of industrialists, technicians and a vast number labourers alike.

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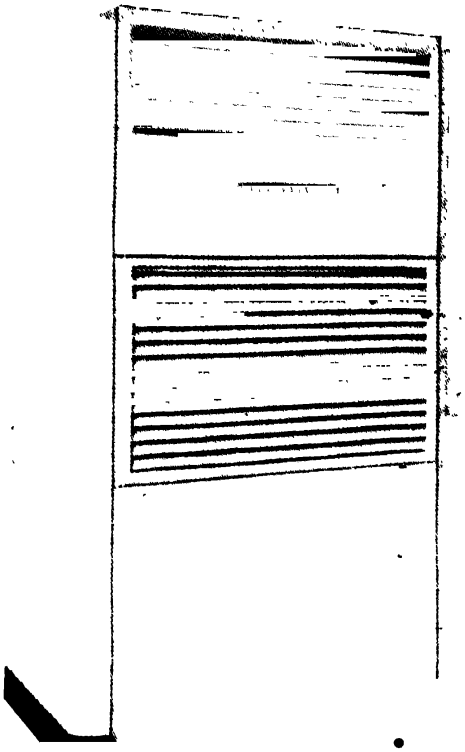

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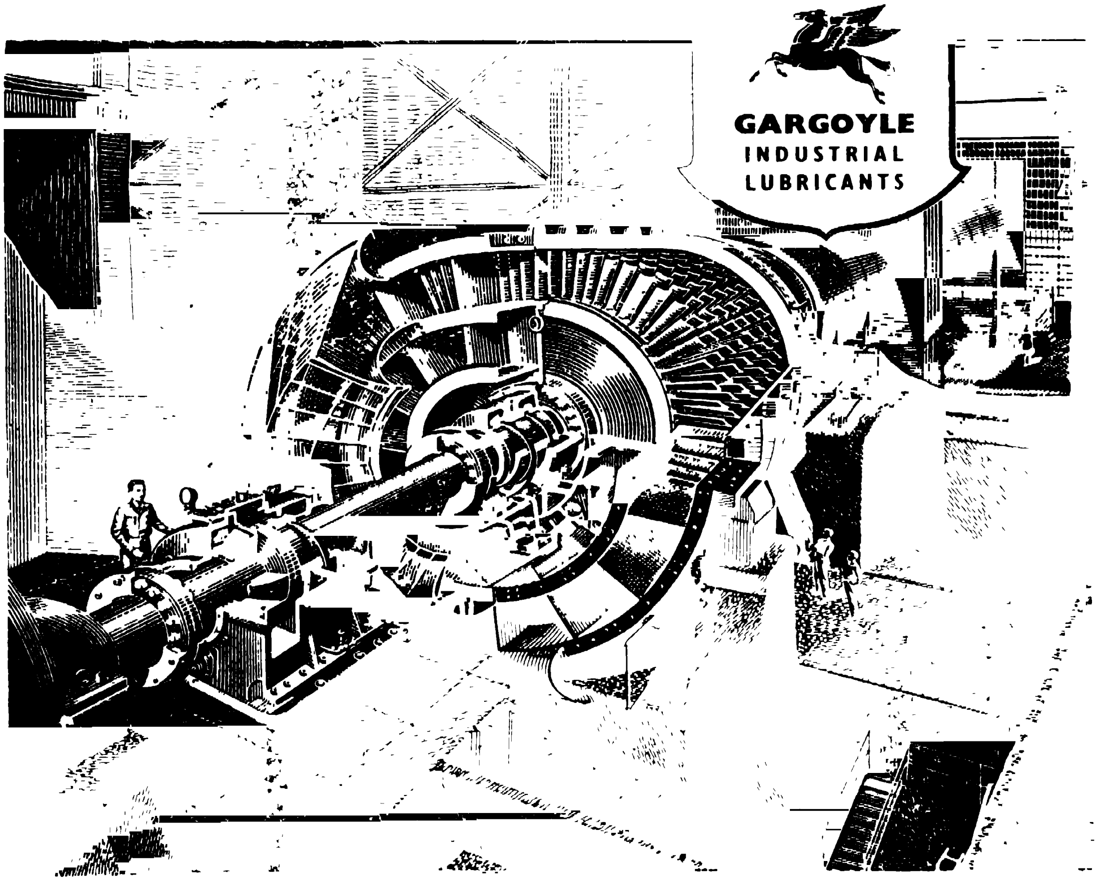

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THE COTTON TEXTILE INDUSTRY IN INDIA

SAMARJIT GHOSH, M. A.,

NOW for a century, the Indian Cotton Textile Industry has come to spell the daily bread of millions of this sub-continent and its supply and price determine the welfare of wide-flung regions all over the world Its output, transport and varied manufacture create wealth which is reflected in the trade accounts of great industrialised nations, and which reach directly or indirectly upon all other industries

First enterprise

Bengal has the honour of having the first cotton textile mill in this country as in 1818 the Fort Gloster Mills—now known as Bowreah Cotton Mills Ltd,—was founded in the Howrah district for spinning locally grown cotton But this memorable event stands out practically as an isolated one because the next enterprise in this direction was not forthcoming for a long time. This uncalled for silence was broken by Mr Cowasjee Davar, a Parsee merchant with great vision and foresight Seeing that the East India Company was reaping fabulous profits in exporting large quantities of cotton, he undertook to start a company in 1851 which finally took shape as the Bombay spinning Mills and started functioning at Tardeo in the island of Bombay in 1854 Soon after this mill started production, the demand for Indian Cotton became heavy due to the American Civil War and was marked by a high rise in the price of the commodity As it was now found that exporting of raw cotton would fetch more money, Indian industrialists did not start new mills for turning cotton into yarn and cloth

With the cessation of hostilities in America, a slump in the trade came as an inevitable consequence. But the force of reconstruction worked successfully and by 1868, as many as eleven mills were erected in Bombay alone, and by 1876 the number of mills in the country rose to 47 In the period from 1875 to 1890, the Indian Mills experienced very prosperous condition though much hazards had to be weathered In 1875, a duty of 5% was imposed on import of Egyptian and American Cotton in India, to prevent this country from importing such superior quality cotton and competing with Manchester in her fine goods Moreover the last decade of the nineteenth century was marked with strikes and bubonic plague in Bombay, the centre of Indian Textile activities The result was that production was hampered to a great extent. The situation was further aggravated by the closure of mints for free silver coinage in 1893 resulting in complete stoppage of export trade in coarse yarn with China and Japan

20th Century

In spite of these hurdles, India stepped in the twentieth century with 193 mills with 4,945,783 spindles and 40,124 looms The extent of development during the last quarter of the past century can be had from a comparison of these figures with those of 1876,—47 mills with 100,112 spindles and 9,139 looms.

The years preceding the first World War were not at all happy for Indian Textile merchants Firstly, there was an enormous scarcity of cotton due to great famine of 1900 which overtook western India The repurcussions were heavy and many of the Ahmedabad and Bombay mills had to close down their concerns and many changed hands at absurdly low price. Secondly, in 1910, duty on silver was enhanced by the Government of India which was detrimental to the trade with the Far East. Thirdly, cotton mill industries were established in Japan resulting a loss of Japanese market to Indian Traders All these factors made India lose her overseas markets, particularly China, where the

Indian yarn was completely displaced by the Japanese yarn.

Changed Character

But, on the whole, this heart breaking period was a blessing in disguise India's textile industry was consisted of mainly coarse yarn spinning machineries. With the closure of Chinese and Japanese markets, the character of Indian industry had to change and the energy was switched over in establishing our own weaving departments. The following chart will show the number of looms against the number of spindles installed in our industry, during 1900 and 1939.

Year	Looms per thousand spindles
1900	8.8
1915	17.5
1939	23.6

The beginning of first world war marked by a panicky nature in all the domestic industries But the increasing trend of domestic demands of textile commodities cleared out the cloud of nervousness As the foreign textile mills were engaged in supplying their Defence Forces, Indian market was open to the national textile manufacturers The opportunity was fully utilised and record profit was made by Indian mills during 1918 and 1921. On the Stock Exchange, scripts of textile companies were quoted six or seven times over the par value, while before the war the shares of many companies were unsaleable even at a discount.

Unfortunately the large profits which were earned during the war and the subsequent boom had not been properly husbanded by most of the mills. Added to this Japan emerged as a powerful competitor in the textile trade. Prosperity was replaced by depression of a mild but chronic character. As distinct from the depression in Lancashire, the depression was marked by no decrease in output commensurate with the changed fortunes; but profits were very low. The cause of depression obviously was production on large scale than the market could absorb at remunerative prices. However, the depression had been localized. A comparison of profits of the Bombay cotton mill industry with those for the Ahmedabad mill industry shows very widely differing industrial fortunes in those two main centres of the industry, disclosing the fact that the depression had been almost wholly the outcome of the weak position of the Bombay mills since 1921, due according to the Tariff Report of 1927, to over investment in the boom period.

Percentage of Dividend to Paid-up Capital in Indian Cotton Industry

Year	Bombay Cotton Mill Industry	Ahmedabad Cotton Mill Industry
1921	30	61
1922	16	31
1923	5	12
1924	3	13
1925	2	14

A general movement for cotton manufacture to move from Bombay to Ahmedabad and other up-country centres were beginning to take place before the war but it was hurried on by war conditions and to post war boom. The reason for this industrial shift was the lower cost of production of which yarn and cloth could be made in the centres outside Bombay where the, wage costs, cost of fuel and power, charges for water and local taxations were heavier than other centres

How the change shaped the structure of the industry is evident from the following chart.

Mill Production of Cloth in India
(in million yards)

Year	Bombay	Rest of India
1908-09	456	369
1913-14	592	572
1918-19	758	693
1921-22	922	810
1924-25	986	984
1925-26	872	1,083

India's position in the world trade after the readjustment of the industry into a combined spinning and weaving pattern can be judged from these two charts contained in the memorandum on cotton presented to the Geneva Economic Conference of 1927.

World Export of Cotton yarn (metric tons)

Countries	Av. 1909-1913	%	Av. 1923-25	%	Ratio of export in 1923-25 & 1909-13
Great Britain	98,397	33.6	75,237	33.4	76.5
Italy	13,149	4.5	15,219	6.8	115.7
India	89,924	30.7	16,967	7.5	18.9
Japan	51,497	17.5	49,770	22.1	96.6

World Export of Cotton Piecegoods. (metric tons.)

Countries.	Av. 1909-13	%	Av. 1923-25	%	Ratio of export in 1923-25 & 1909-13
Great Britain	536,837	69.9	369,111	50.5	68.8
U. S. A.	33,465	4.4	42,588	5.8	127.3
Italy	42,910	5.6	58,350	8.0	136.0
India	12,728	1.7	18,674	2.6	146.7
Japan	10,336*	1.3	84,188	11.5	814.5

* for 1909-11 only

After the great depression of 1930-31, the industry began to make some recovery. General economic condition favoured the industry and regulation of trade with United Kingdom and Japan through bilateral treaties accentuated a healthy reconstruction While in the five year period from 1926-31 only 37 new mills were established, the next quinqueneal period showed the increase by 56 mills. The out-break of the Sino-Japanese war lessened the impact of foreign competition to a great extent and helped the industry indirectly to its further growth Moreover, tariff-protection which was first introduced in 1927 and later strengthened in two stages, once in 1930 and again in 1933, safeguarded the industry in those critical years. And finally with the outbreak of the war in September, 1939, the situation took a different turn and that for the better.

Present Position

In the post war period, India was able to dominate the Eastern scene because of the absence of a real competitor. The partition of the country in 1947 made some changes in the trade position but could not materially affect the growth of the Indian Textile Industry. The real danger now lies, as far as the export trade is concerned, with volume of commodities Japan can dump in the foreign markets. It will be interesting to note that the Lancashire businessmen have already taken precautionary measures in English colonial markets to prevent Japan from probing into the scene as she did in the twenties and thirties In Kenya and Uganda, Japanese textiles have been banned until 1st July, 1953. It was also disclosed by the Cotton Board in England that Japanese mills sold more cotton cloth than Lancashire mills to the Commonwealth countries in the first half of 1952. India too has now lost much of her far eastern market due to reappearance of Japan and also due to indigenous growth of textile mills in such countries in recent times. How the world trade in textiles will take shape in future is difficult to forecast and many policies may be enunciated in the forthcoming International Cotton Conference at Buxton to maintain a healthy atmosphere in the cotton trade.

Recent Output

	Yarn m lbs			Cotton m. yds.
	Total	consumed for weaving	Balance for handloom	
1946	1,394	983	411	4,005
1947	1,317	924	393	3,840
1948	1,441	1,012	399	4,315
1949	1,356	969	387	3,900
1950	1,172	873	299	3,670
1951	1,302			4,080

The incentive to investors in the cotton Textiles in this country, however, is always present There are immense rooms for reorganisation of the industry as it is not yet self-sufficient either in the production of textile machineries or in the supply of raw materials The per capita consumption of cloth in this country is abnormally low in comparison with U S A and other western countries Given a condition through which the purchasing power of the people can be measurably increased, the Indian Cotton Textile Industry is promised a flourishing future

To understand the position of Indian Cotton Textile Industry at a glance, some salient facts are given below

1. The fixed capital in Textile Industry of India is Rs. 60 crores
2. It gives direct employment to 800,000 workers.
3. It consumes practically the whole cotton crops of India (except about 200,000 million bales of short staple cotton)
4. It consumes over two million tons of fuel (coal, coke, charcoal & firewood), about 50 million gallons of fuel oil; and about 900 millions Kwh of electricity
5. It consumes annually Rs 65 million worth of sizing materials, Rs. 35 million worth of dyes and chemicals, Rs 140 millions worth of millstores and Rs 30 million worth of packing materials.

About 10% of the industry's cloth output is represented by coarse cloth 53% by medium cloth, 30% by fine cloth and 7% by superfine cloth

Dhoties and Sarees constitute 20% and 12½% respectively Important lines of manufacture are in grey and bleached shirtings and sheetings, grey, bleached and dyed drills, longcloth, grey and bleached poplins, gingham. coloured woven shirtings, coatings, doria, printed leopards; printed mulls and voiles

Machinery

Millstores manufactured in India and the percentage of country's requirements which can be met by domestic production:—Bobbins—75%, Shuttles—50%, Pickers—80%, Cotton Healds—65%; Wire Healds—40%; Reeds—50%, Roller Skins, Spring Buffers and Picking Bands—60%; Cotton Ropes and Bandings—30%; Cotton Spindle Tape—20% and Maize Starch—100% The qualities of millstores at present being manufactured in the country leave scope for improvement though the industry is progressively improving.

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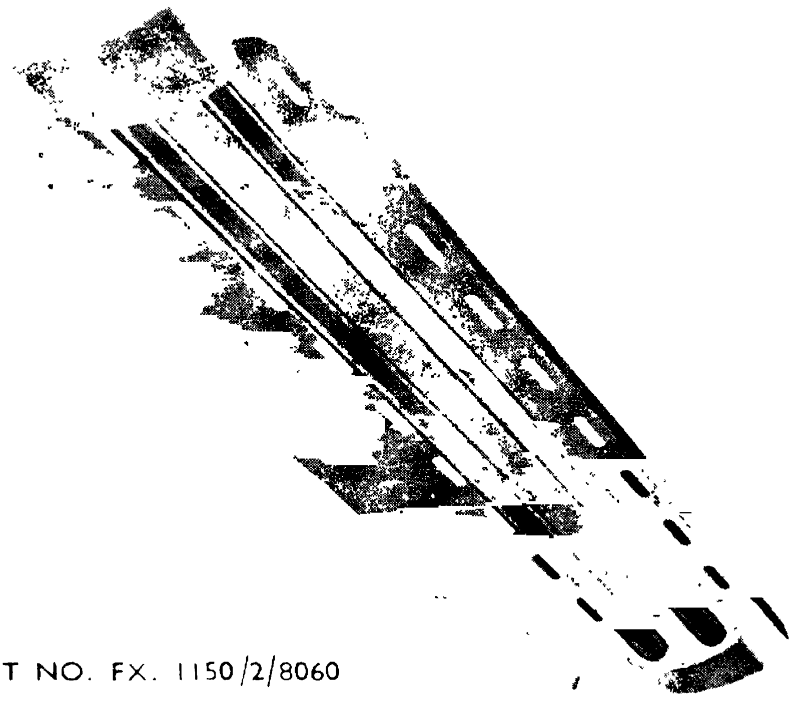

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LAS (B)

TWIST IN COTTON YARNS

A. K. DAS GUPTA, B.Sc. (Cal.), B.Sc. Tech. (Manch.),
A.M.C.T., A.T.I.(Manch.)

THE essential function of twist in the cotton yarn is to bind the fibres to one another so that when under tension the stress may pass from fibre to fibre along the length of the yarn. This, it does by bringing into play pressures normal to the surface of the fibres. Forces which tend to pull fibres apart also tend to cause fibres adhere together.

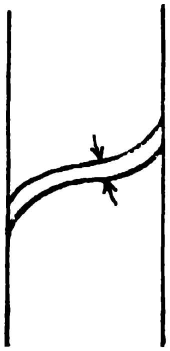


Fig. 1

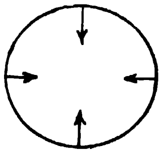


Fig. 2

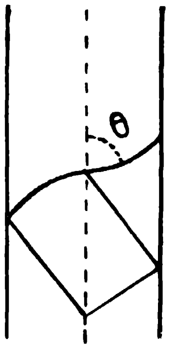


Fig. 3
θ-Anglo of twist
i.e. Surface twist

When the ratio of the former to the latter exceeds a certain critical value which corresponds to the co-efficient of friction, the slippage takes place. The value of this ratio depends primarily on the twist angle and as the angle increases, other things being equal, this interfibre pressure will increase relative to the forces acting along the fibres axes and thus diminish and prevent fibre slippage. It may also be observed that smaller the angle, less the centrepetal pressure and easier it is to pull fibres past each other.

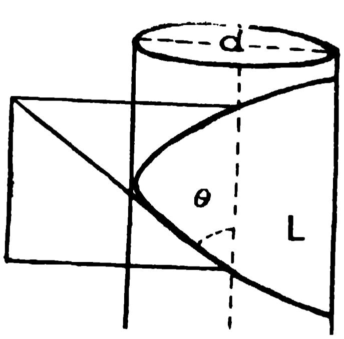


Fig. 4

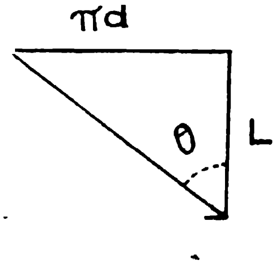


Fig. 5

The figure 4 above shows the yarn having one turn of twist in length L, in other words, L represents the length of one turn.

θ is the angle of twist and d the diameter of the yarn.

Twist Per Inch (T. P. I.) $= \frac{1}{L}$

$\tan\theta = \frac{\pi d}{L}$ and d in proportional to $\sqrt{\frac{1}{ct.}}$

or $d = \frac{1}{c\sqrt{ct.}}$ (taking 'c' as constant)

Again, T.P.I. $= (C \tan\theta) \times \sqrt{\text{count}}$

C $\tan\theta$ is known as twist factor and is represented by K, i.e., T.P.I. $= K \times \sqrt{ct.}$

That K is proportional to $\tan\theta$, i.e. depends on twist angle can be proved by the following :

$\text{count} = \frac{1}{\frac{\pi d^2 c}{4}}$ where c is a constant

$$\text{T.P.I.} = \frac{1}{L} = K\sqrt{\text{count}}$$ where K is a constant and known as Twist factor.

$$\therefore K = \frac{1}{L \times \sqrt{\text{count}}}$$

$$= \sqrt{\frac{d^2 c}{4}} \times \frac{1}{L}$$

$$= \frac{d}{L} \times \sqrt{\frac{\pi c}{4}} \quad \left[\sqrt{\frac{\pi c}{4}} \text{ being a constant represented by } C\right]$$

K is, therefore, proportional to tan θ, or in other words, K depends on the twist angle θ.

It will now be observed from the following that twist angle is less for coarse places than for thin places.

When n = No. of fibres in the cross section

t = turns per inch

a and c are constants for the yarn

$$(n - a)t^2 = c$$

hence t is proportional to $\frac{1}{\sqrt{n - a}}$

but $\tan \theta = \frac{\pi d}{L}$

and $\frac{1}{L} = t$ (i. e. Turns Per Inch)

Then $\tan \theta = \pi dt$.

d is again proportional to $\sqrt{n}$ (d being proportional to $\frac{1}{\sqrt{ct.}}$ and count being proportional to $\frac{1}{\sqrt{n}}$)

Hence,

$$\tan \theta \text{ proportional to } \frac{\sqrt{n}}{\sqrt{n - a}}$$

Therefore as n increases, $\frac{\sqrt{n}}{\sqrt{n - a}}$ decreases.

i.e. with the increase of No. of fibres the angle θ decreases, or in other words, Twist angle decreases with the increase in yarn diameter. Hence with finer fibre there will be more number of fibres in the cross section and we can reach fibre binding with less twist angle or the Twist angle is less in coarse places than in thin places

Characteristic of Yarn

The characteristic of yarn i.e hardness or the softness of the yarn depends upon the twist factor or the twist constant As for example the character of 64^s yarn with 32 T P I is the same as that of 36^s with 24 T P.I the twist constant being same in both the cases

In using the spinners rule, i e Turns Per Inch = constant x $\sqrt{ct.}$, it is generally assumed that all yarns spun with the same twist constant will have the same surface angle of twist and hence will be same in character, however much they differ in count. But the spinners rule holds good only if the specific volume (v) remains the same, i.e. if all yarns of a given cotton and spun with a given twist constant are of the same diameter This, however, is not the case In general 'v' will vary according to the resistance which the fibres offer to compact together by the combined action of twist and tension during spinning The following factors will give rise to difference in twist angle though only small for a given twist factor or twist constant. —

(1) Fibre stiffness—Coarse cottons with high resistance to bending and tension tend to make oozy yarn with relatively high 'v'.

(2) Relative humidity during spinning—The increase in humidity decreases fibre rigidity and will give lower value for 'v'

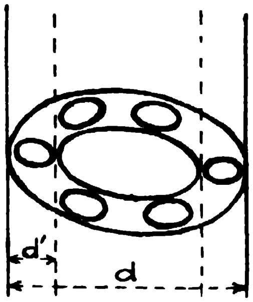
(3) Fibre crinkliness or Crimp—The straighter the yarn, the more compact it is and therefore lower is the value of 'v'.

(4) Fibre arrangement—The greater the parallelisation of the fibres the lower the value of 'v' e.g. 'v' is lower for combed yarn than for the carded yarn

(5) Spinning tension—The greater the tension during spinning, the greater the compactness of the yarn during its formation and

this compactness it is likely to retain in large measure owing to elastic imperfection.

With yarn under considerable tension even approaching breaking load the effect is probably to minimise the difference in 'v' arising from the above factors though it is unlikely to eliminate them completely



d = external dia.
d-d' dia. formed by axis of the Surface fibre

Fig. 6

Taking account of the thickness of theoritical outer layer of fibres (d), the equation for Twist Per Inch will read as

$$\text{T. P. I.} = \frac{1}{L} = \frac{\tan\theta}{\pi(d-d')}$$

$$= \frac{\tan\theta}{\pi pd} \quad \text{when } p = \frac{d-d'}{d}$$

$$\text{Also T.P.I} = \frac{29.3 \tan\theta}{\pi p\sqrt{v}} \times \sqrt{n} \quad \text{where } v = \text{specific volume}$$

$$n = \text{count } \& \quad \frac{1}{d} = 29.3\sqrt{\frac{n}{v}}.$$

Angle of twist will, therefore, be less as yarn gets finer. Thus for the same cotton twist has to be increased as yarn is spun finer

Breaking load & Twist factor.

It has already been established that twist brings into play interfibre pressure which helps cohesion between fibres and resists slippage. Thus increase in twist brings in greater cohesion of fibres and results in increasing strength of the yarn. There must, however, come a point when any further increase in twist will not cause the fibres to cling together. This point therefore is the saturation point of the twist.

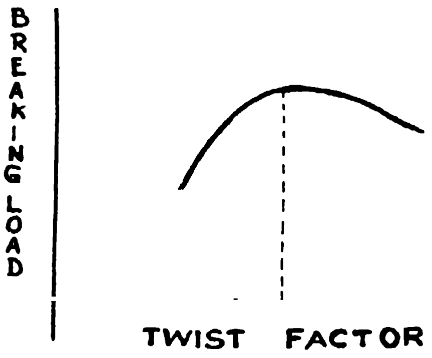


Fig. 7

The figure above shows that there is a limit upto which the breaking load increases with increase in twist. The interfibre cohesion reaches the limit of resistance to slippage and beyond this optimum point the breaking strength decreases with further increase in twist This optimum twist is different in different types of cotton

The optimum twist also depends on other factors such as stickiness of the fibres, the fineness and length of the fibres and also on the inclination of the fibre to yarn axis

The increase in twist constant again increases the extension at break uniformly throughout the spinning range. So higher the twist constant, the more extensible is the yarn, of course upto the optimum point

Distribution of Twist·

Balls has shown that the twist in a long length of yarn will, when tension is applied, tend to distribute itself or re-distribute itself so that the twist angle is more or less the same throughout. This means that the spinners rule also applies from one part to another of the same yarn. Balls also found that the thick and slubby places have a smaller twist angle than the average. The thinner places, it has been observed, tend to have a slightly higher twist angle than the thicker places. Consequently, the thin places are slightly harder twisted than anywhere else and thick places are slightly softer twisted.

In ring spinning the yarn is only free to rotate about its own axis for a short distance of about 12 to 18 inches as once the yarn is on the bobbin there is no chance of any further redistribution of twist. The distribution of twist can, therefore, only take place between the delivery rollers and the bobbin and we cannot even regard this length to be absolutely free to distribute the twist on account of the following: —

(1) Pressure of traveller—as any pressure tends to act as a brake against twist distribution.

(2) Lappet guide also tends to act as a brake against free distribution of twist.

If we ignore these two points, we might expect in Ring yarn to find a reasonable degree of constancy in twist angle between the traveller and the front roller. Even though certain number of twist per inch is put and same maintained throughout the spinning of a particular count a constancy of Twist constant may not be had because of bad piecings and as roller drafting produces frequent thick and thin places, thus forming softer and harder places than average. The efficiency or excess of twist io the yarn is "trapped" when the yarn is wound on the bobbin.

In subsequent process such as doubler winding or warp and weft winding or in slasher etc. longer length yarn are free for the redistribution of twist. The processes subsequent to spinning, therefore, give an additional opportunity for twist redistributing itself in relation to the thick and thin places and the count of yarn

The extent to which the yarn is able to take advantage of these opportunities depends on the available energy in the yarn for doing so and also on the time factor, cotton being partly plastic and partly elastic substance If the yarn is left on the bobbin for a long time or if it is steamed on the bobbin which aids a permanent deformation, the redistribution of twist will not be so effective. The amount to which a substance like cotton can have energy for redistribution is definitely influenced by the time the twisting force is retained

It is, therefore, advisable to give an opportunity for redistribution of twist immediately after spinning.

Hesitation may be a virtue among philosophers,
but it is a dangerous thing in business.

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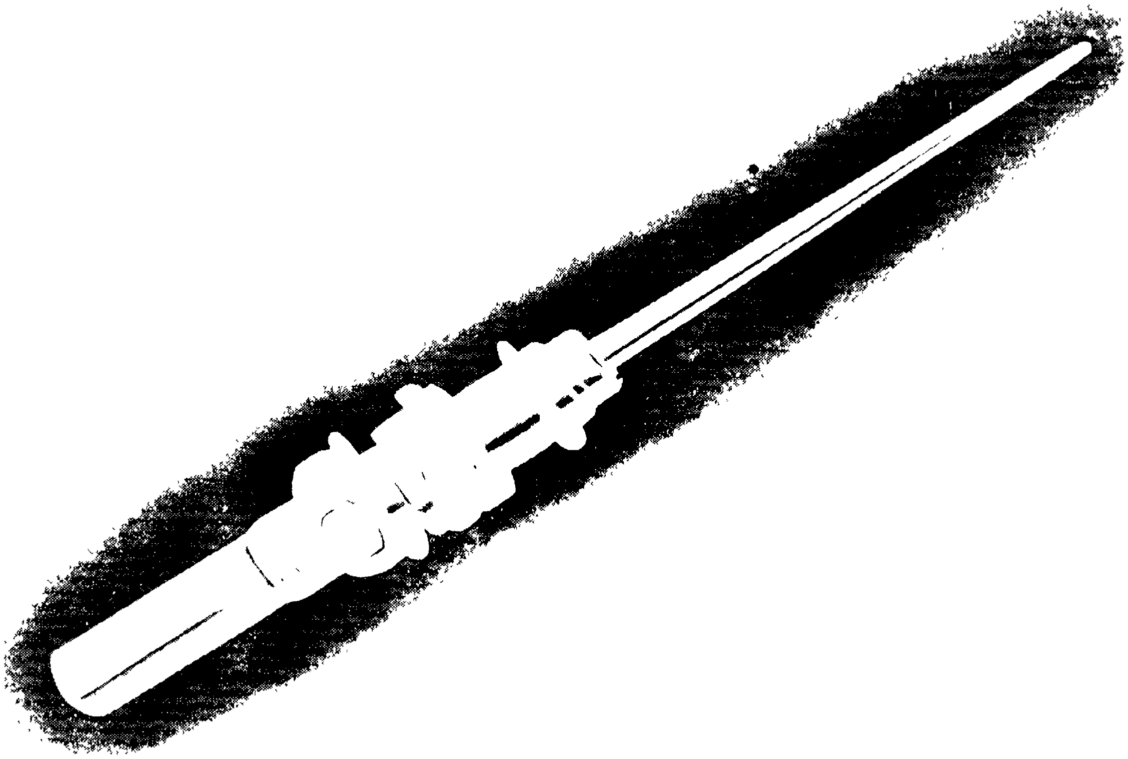

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THE APPLICATION OF COLOURLESS FLUORESCENT DYES

E. C. CASPAR

(*Laboratories of Messrs. J. R. Geigy S.A., Basle, Switzerland*)

(*In the Journal of the Society of Dyers and Colourists, March, 1950*)

THE application of colourless fluorescent dyes has become of great importance during the past few years, since they enhance whiteness to a considerable degree. They are used in the textile, soap, paper, and laundry industries. It is possible that new fields of application will be found for these products The process is called *white dyeing* or *optical bleaching*, the former term having been used for a long time in silk dyeing. The expressions *whitening agents* and *whitening effect* are also used. These fluorescing substances, mostly applied after the normal bleaching process, give a remarkable luminosity which could not previously be achieved, and which does not have any detrimental additional effect on the textile fibre

A few papers have recently been published on colourless fluorescent dyes,[1] but it might be interesting to give a brief summary of the development of "white dyeing." It seems now to be generally agreed that the original idea of improving the whiteness of textiles was due to Krais,[2] who attempted to use substances which give colourless solutions but have a strong fluorescence.

Krais based his idea on previous investigations made by von Lagorio,[3] which had shown that fluorescent dyes reflect more visible light than they have absorbed from the visible part of the spectrum.

Fluorescence is an emission of light excited by radiation and lasting as long as the latter. Fluorescent substances, therefore, have the property of absorbing part of the light they receive and of emitting it at other wavelengths. In 1852 Stokes discovered empirically the following law: the exciting radiation is of shorter wavelength than the fluorescent light emitted. It can be explained by the higher energy of short-wavelength radiation, for only part of the energy absorbed is emitted as fluorescence. If the exciting radiation lies in the ultra-violet range and the fluorescent radiation in the visible, then an additional luminosity is obtained. This is the case, for instance, with basic dyes, such as Auramine O and Rhodamine B, and explains why this class of dyes possesses so good a brilliancy. Light from any source, especially diffuse daylight, contains a certain amount of ultra-violet radiation, invisible to the human eye. If we dye a bleached fabric with a fluorescent substance which transforms ultra-violet rays into visible light, an additional luminosity is obtained. These substances must emit mainly blue or violet rays, which are complementary to the yellowness of the fibre, in order to produce a pure white. In other words, the use of fluorescing dyes gives the same effect as bluing, with the advantage, in contrast to the old method, that it does not result in a loss of light, but on the contrary in an increase in intensity in the visible spectrum.

Krais made his first tests with æsculin, a glycoside extracted from the bark of the horse-chestnut tree. On half-bleached linen he obtained a similar effect to that obtained by full bleaching. But he was also the first to recognize the drawbacks of this substance, viz., insufficient affinity and deficient fastness to light. However, Krais's idea was not forgotten. In 1934, Imperial Chemical Industries Ltd. made a patent application covering the use of derivatives of aminostilbenedisulphonic acid for the bleaching of cotton. These products were the first representatives of direct-dyeing fluorescing agents, after it had been recognized that both æsculin and the lithium salt of umbelliferone acetate, which had also been tried, were unsatisfactory because of their bad wet fastness and very bad

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light fastness. The development of suitable bleaching agents for the textile industry progressed rapidly, so that we now have a series of very good white-dyeing agents.

Although fluorescence is shown by a great number of organic compounds, the intensity of the fluorescence of a typical white-dyeing agent is always much stronger than that of its own colour; in other words, it does not show a substantial selective absorption in the visible spectrum.

Nearly all the technical products belong to the aromatic or heterocyclic series; many of them contain condensed ring systems.

On the evidence of the published literature, it appears that most of the whitening agents used on cellulosic fibres are derivatives of diaminostilbenedisulphonic acid These are also used as additions to detergents and rinsing products. Benziminazole and glyoxaline derivatives are also advocated Diphenylglyoxalinonesulphonic acid is known especially for application to wool. It is not understood why an organic substance is fluorescent and what the determining factor in its formula is, but conjugated double linkages seem to have some importance.

In discussing the applications and properties of these colourless fluorescing agents, the term *whitening agents* will be used instead of "fluorescent substances" The effect obtained will then be called *whitening effect.* Both "optical bleaching" and "fluorescent bleaching" seem to be somewhat misleading, since the effect of whitening agents depends very much on the cleanness of the fabric to which they are applied. With dark or yellow material a *chemical* bleaching is essential. Whitening agents have no bleaching properties of their own in the ordinary sense. Because of their blue to violet emission they are much more similar to the bluing dyes confer an additional luminosity on the textile. used in tinting. The only difference is that they The expression *white dyeing* is, therefore, more logical.

The field of technical application of white-dyeing agents includes the textile, paper, detergents (both soap and synthetics), and laundry industries. Little is known with reference to pigments, lacquers, rubber, and plastics, but it is possible that some day a whitening agent will be found suitable for these products.

In the textile industry, whitening agents have had a very great success in the bleaching of white goods, especially of cotton. It became possible for the first time to obtain a degree and a quality of white that had been impossible before without greatly impairing the quality of the fabric. This is the great advantage of whitening agents. However, one cannot completely dispense with chemical bleaching. If the fabric is not already bleached, i.e., if it has not a sufficient degree of whiteness, then a colourless whitening agent with blue fluorescence cannot compensate for the yellow or brown colour of the fabric. Unpleasant colorations occur because the insufficiently bleached cellulosic fibre quickly becomes yellow under the influence of light and storage. Whitening agents do not cover up a change in the colour of the substrate.

Of course, there exist cotton goods that can be white-dyed very easily without any bleaching or at most with one single cleaning operation, notably cheap napped qualities for lining purposes, shoe linings, etc. It is also possible to avoid bleaching in the case of viscose rayons and staple fibres, but it is not then possible to obtain a pure, dazzling white.

In the treatment of multicoloured piecegoods, the use of white-dyeing agents has proved very economic, because their application permits grey or scoured instead of bleached yarns to be used. The piece can be treated with whitening agents during finishing, with a very pleasant resulting effect. Cotton wadding can be made much whiter by the use of whitening agents. After the kier boiling and bleaching, the cotton can be treated during the rinsing operation. Successful tests have also been made by adding specially resistant products to the boil-off liquor. The combed cotton sliver can be white-dyed during the bleaching process, e.g., with hydrogen peroxide, or during the rinsing.

Yarns can be white-dyed in bleaching or dyeing machines.

White-dyeing agents are especially recommended for the treatment of cotton knitted goods made of grey yarns, which are boiled off in the piece. The bleaching time can be substantially shortened by performing only one bleach with chlorine, followed by white dyeing, instead of a combined chlorine-hydrogen peroxide bleach.

In the manufacture of viscose rayon and viscose staple fibre (spun viscose), suitable white-dyeing agents have afforded new possibilities The product can be added directly to the xanthate (viscose) before the spinning process, when the viscose rayon is brightened in the mass. Of course, it is necessary to have a product that is stable to the high alkali concentration and that will withstand the subsequent desulphurizing and cleaning operation. This process is particularly interesting for viscose rayon dyed in the dope (spun-dyed), especially in light shades. Baby pinks, baby blues, and salmons obtained by the addition of the white-dyeing agent look brighter and purer. Blacks and navies become bloomier. Cotton, linen, and viscose piecegoods are preferably treated in the finishing process on the padding mangle Brightening and bluing can be carried out in one operation on the padding mangle by adding the products to the finishing liquors Rayon crepes are often treated on the winch in one operation in the hydrogen peroxide bleaching bath or by separate treatment.

It should be possible to add white-dyeing agents to peroxide liquors when working with continuous bleaching processes in J-boxes Since these articles must usually go through the padding mangle, the white dyeing is best carried out at that stage.

Ribbons, bands, elastic bands, etc., are treated by dipping.

There are limitations to these white-dyeing processes with colourless fluorescent dyes. In the treatment of yarns, fine and glossy fibres need less dye than coarse and dull ones. If the percentage is too high, glossy material becomes immediately irridescent, i.e., the appearance of the textile changes with the direction of viewing and it shows a dichroic effect. Because of their optical properties, these whitening agents accentuate the defects of badly performed bleaching and non-homogeneous fibres. This is particularly noticeable in linen and hemp. It is much easier to brighten up a very fine linen batiste, which contains a lower percentage of non-cellulosic material, than heavy linen clothing containing relatively more impurities. Jute is particularly difficult in this respect.

White-dyeing agents, unfortunately, also show creases and chafe marks which would not be so evident had they not been treated

Whitening agents can be used not only in the bleaching, i e., in the finishing, of grey goods, but also in the dyehouse, in the printshop, and in the finishing of multicoloured woven goods

In the dyeing of pastel colours, remarkably clear dyeings are obtained The whitening agents should be added to the exhausted dye-bath; a better effect is thus obtained than if the normal dye is applied to a previously white-dyed material.

The use of whitening agents to obtain clear white effects on multicoloured woven articles also has the advantage of brightening up the colours by contrast.

It is most important to note that the use of white-dyeing agents shifts the shades towards the blue, and this fact must be taken into account in dyeing baby pinks and salmons.

In calico printing, white-dyeing agents are used to brighten up white discharge patterns and for the amelioration of the contrast of coloured prints, either by a preliminary treatment or in a separate bath following printing and rinsing. Multicoloured discharge styles and direct prints show a brighter appearance, especially blues, greens, and greys. Provided the agent is stable to hydrosulphite, it may also be applied direct in the discharge paste. However, the addition of a whitening agent will not improve the dischargeability of a badly dischargeable dye: if a dye is not easy to discharge, the effect cannot be overcome simply by adding a white-dyeing agent.

In the wool trade, white-dyeing agents have not yet conquered the market, for there have been very few products suitable for application to wool. Then also white wool articles are not so frequent as white cellulosic textiles. However, whitening agents provide a cheap and easy means of obtaining white wool without damaging the fibre, which was impossible by the ordinary bleaching methods.

It is possible to obtain very pure whites on peroxide-bleached wool, by treating with products which are absorbed by the fibre from acid baths. These whites are far brighter than those obtained by bleaching with peroxide, hydrosulphites, bisulphites, or gaseous sulphur dioxide Light fastness and colour have a determining influence on the possibilities of application of such a product.

The traditional shade of bluing agents used on cottons has not met with much success on wool, because one is not used to seeing bluish, chalky whites on this material Milky, greenish shades are accepted for wool, and colder ones for cotton. As a consequence, whitening agents for wool should give a greenish fluorescence, which, combined with the natural hue of wool, will give a warm impression. The fastness to light of such products should be very good, because wool itself quickly turns yellow under the influence of light. The object of the treatment would certainly not be attained if the treated fabric appeared yellower after exposure to light than the untreated one.

White dyes can be used in the finishing of wool, especially in the dyeing of pastel shades, mainly baby pinks and blues on knit goods. The products are added to the dyebath, but they can also be used as an after-treatment of the dyed fibre. There are great possibilities in the knit-goods trade, either on yarn or on piecegoods, and also in the wool-felt industry for ladies' hats.

Silk can be white-dyed with the agents employed for wool as well as with those used for cellulose. Because of its natural gloss, silk has a very strong tendency to fluorescence and consequently to give fluorescent dyeings It is, therefore, necessary to watch very carefully the amount of white-dyeing agent used Exceptional difficulties are encountered in treating coarse silks, particularly tussore.

Up till now no satisfactory white-dyeing agent has been found for acetate rayon It is true that weak effects can be produced, especially with acid dyeing, but the fastness properties are inadequate.

Among synthetic fibres, it is possible to white dye nylon, which is comparatively difficult to bleach a pure white, simply by using the typical white-dyeing agents for wool

In the paper industry the treatment of cellulose fibres is by far the most important application However, for banknote paper, paper for securities, etc it is possible to apply white-dyeing agents to wool mottling fibres. The process is fundamentally the same as for dyeing: the agents are applied in the beater. Finished paper can be treated either by a dip-dyeing process or by a coating procedure, employing the usual fillers and pigments. The white dyeing agents used for this must be very stable to acid to withstand the precipitation of the rosin-size and alum without becoming yellowish. White-dyeing agents are used in the paper industry mainly for fine papers, cigarette papers, cellulose wadding, and crepe papers. Furthermore, they are usually combined with tinting dyes for use in the paper industry, since the most usual products almost always give too reddish an effect.

White-dyeing agents can be used in the soap industry for the following purposes—

(*a*) As additives to soap powders, being absorbed by and bleaching the textile during washing.

(*b*) Whitening of the soap or soap powder itself, so as to improve its appearance.

(*c*) A combination of (*a*) and (*b*).

(*d*) As additives to rinsing agents.

The addition of white-dyeing agents to

washing agents of all kinds (soaps and synthetics) for the purpose of enhancing the whiteness of the textiles washed therewith has often been mentioned in patent literature. It is clear that this process will become very important in the future. Of particular interest in this connection are those products which simultaneously enhance the whiteness of the washing agent, an important sales point. Thus, in certain circumstances, an optical bleaching agent for soaps or powder washing agents can be of considerable commercial interest, although without action on the goods washed.

The addition of white-dyeing agents to rinsing agents, with consequent improvement of the appearance of the wash, is comparatively easily achieved, since it is merely a modification of the whitet-dyeing process, involving substantive absorption of the agent by the fibre. When these agents are combined with washing and rinsing agents for domestic use and for textiles, there is a certain danger of their accumulating on frequent washing If white-dyeing agents which are very fast to washing are employed, the concentration on the fibre will increase at each wash. Under certain conditions this may lead to the appearance of displeasing dyeing effects. Thus the products to be aimed at should be themselves very faint in colour and should not be too fast to washing. Furthermore, any decomposition products resulting from the action of light or boiling alkalis used in washing should also be colourless.

It is probable that at present no product exists which completely fulfils these desiderata. Nonetheless, there are already some reasonably satisfactory products on the market.

In the laundering trade, rinsing agents containing white-dyeing agents are already in use. It is natural that peculiarities due to the optical nature of the effect should arise in this application. The varying degree of bleaching and of wear and incrustation with lime soaps and hydro or oxycelluloses of the textiles being washed gives rise to varying absorptive power for the white-dyeing agents. This may occasionally bring about too strong or too weak an effect with some articles. By combination with normal bluing dyes it is always possible to compensate for these variations to some extent.

For the sake of completeness the use of colourless fluorescent dyes as marking inks may also be mentioned. My own experiments have convinced me that such fluorescent marking inks may be used even with white-dyed textiles, since pronounced differences in the intensity of flourescence and in the shade of the dyeing are visible under the ultra-violet lamp.

For use with cellulosic materials, a white-dyeing agent should be absorbed substantively by the fibre from aqueous solution, and also, when possible, by the padding method, so as to give a shade satisfying the traditional tastes, i.e. a greenish to blue tint The wet-fastness properties should be as good as possible in order to guarantee the permanence of the effect. A white-dyeing agent should be stable towards weak acids and alkalis and should be compatible with other finishing agents. Whenever possible, it should be suitable for direct use in the bleaching vats. It should be stable to heat and to storage and should be as fast to light as possible. Consideration of these points alone makes it evident that a white bleaching agent, chemically considered, must be a very resistant product, all the more so when it is remembered that the quantities used can vary from only a few hundredths to a few tenths of one per cent.

Research is constantly in progress in an effort to find new products which will have better properties, particularly as regards shade and fastness to light. Nonetheless, cleanness and the shade obtained play a decisive role in evaluation.

There is no absolute white. It will always remain a matter of taste to decide whether a certain brightening effect will produce a neutral white or whether brighter effects will not be given by faint green, blue, or red toning. White-dyeing agents depend for their emission on the ultra-violet content of daylight, so that the effect can vary in strength and shade.

Since the ability of the human eye to differentiate between colours is greatly dependent on the intensity of illumination, it would appear that judgment of a white produced by the use of a fluorescent dye is frequently influenced by optical fatigue.

By using a fluorescene photometer, e g, to measure the strength of fluorescene in solution and on material, an attempt can be made to eliminate the subjective factor However, it is difficult to correlate the numerical values thus obtained with the visual effects of the resulting white. While it is comparatively simple to measure heat and electricity there are great difficulties in measuring light. These difficulties arise from the fact that heat and electricity are present even if mankind is absent, whereas there can be no light without the eye; without it there would be only electromagnetic waves.

The visual strength is also dependent on the shade Here the conditions are similar to those applying to dyes. Just as it is impossible satisfactorily to compare numerically a blue and a red, so is it equally impossible to express the relative strength of a reddish and a bluish white-dyeing agent by a number.

The value of a white-dyeing agent, moreover, depends not only on its economy in use; the shade and fastness properties and possible applications are at least equally important.

The shade and fastness properties depend on the following factors—nature of the fibre, concentration, time, temperature, liquor ratio, pH, presence of additives, solubility, influence of light while in solution, whiteness and surface composition of the substrate, and illumination of the dyeing. A particularly interesting observation is that the colour of the fluorescence may vary with changes in concentration. With increasing concentration a displacement of shade is observed with many of the commercial products. Thus dyeings produced with the reddish products tend more towards yellow. At very high concentrations this gives a measure of the maximum brightening effect attainable with any given white-dyeing agent.

In the case of textiles which have been well pre-bleached, the maximum brightening obtainable does not play any great part However, it is of importance with paper and soap and in other cases where a relatively dark material is to be brightened, and in finishing processes which impair the white effect (e.g, anti-crease finishing)

The maximum brightening must be regarded. in addition to the usual strength comparison at low concentrations, as a separate basis for evaluation. It gives a measure of the absolute effect and probably makes possible the detection of the degree of impurity present in products of similar chemical constitution.

The above also explains why no generally valid strength ratios can be given for two different brightening agents.

With all products the fastness to light in solution is inferior to that when the product is fixed on the fibre Thus, we have found that some of the best known strongly reddish products give solutions that, when exposed to diffuse daylight, lose more than half their intensity within an hour. This is not such a disadvantage in practice as might be thought, however, since the dye liquors are not exposed to light, but it should be taken into account.

The illumination of the dyed fabrics is also very important for the correct estimation of the whitening effect, because the slightest reflection of coloured light influences the judgment. Similarly, results will be different according as the object is observed during bright or cloudy weather A disturbing factor still more important is the presence of snow on the ground illuminated by sunshine: under such conditions it is most diffilult to make a correct evaluation.

Another difficulty in the comparison is caused by the difference in constitution of the various products. All the white-dyeing agents lose much of their intensity under artificial light because it contains very little ultra-violet radiation. Modern fluorescent lighting seems to give the best effect. The admixture of pure bluing dyes to whitening agents generally improves the shade of white dye under artificial light; however, it always affects the purity of the bleach.

The above remarks about shade, strength, and influence of light source apply also to the typical whitening agents for wool It is, of course, important not to give a reddish shade to wool because this would look unnatural; some substantive fluorescent whitening agents which also have affinity for wool show this clearly.

The typical whitening agents for wool can be used on bleached material in an acid bath It is interesting to examine the affinity and the rate of exhaustion in a neutral bath, for it seems that in a neutral bath the affinity of bleached wool depends on its previous treatment The wool will take up the dye only if it has previously been subjected to an acid treatment. It is, therefore, possible to obtain good whitetning effects in a neutral bath only on condition that it has first undergone an acid rinse. The difference between such wool and wool which has undergone an alkaline or neutral treatment still remains even after numerous rinses in distilled water after the acid treatment.

It woull be also interesting and useful to have products which could be used in neutral or slightly alkaline baths This would enable us to obtain good whitening effects on raw wool or fairly light-coloured wool by treating it either in a scouring operation or in a peroxide bleaching bath.

References

1 E. C. Caspar, *Textil-Rundschau*, **2**, 212 (1947); A. Landolt, *ibid.*, **3**, 376 (Nov 1948); S. Petersen, *Angew. Chemie*, **1**, 17 (1949).

2 P. Krais, *Melliand Textilber.*, **10**, 468 (1929).

3 A. von Lagorio, *Ztschr. Angew. Chem.*, **34**, 585 (1921).

The light fastness of whitening agents for wool is of very great importance, because wool is very susceptible to yellowing.

Now, if we examine the light fastness of unbleached material, we see that the wool first becomes brighter under the influence of light, even without any whitening agent. This is probably the reason why some white-dyed samples which have been exposed to light for a short period (e g, for 2 hours in the Fadeometer) become brighter than the original unexposed samples. Of course, if the exposure to light is prolonged, the white effect diminishes This is true of all products. When the fastness to light of the fluorescent dye is not particularly good, its decomposition products mask the original bleaching effect very quickly If the exposure to light is continued for a longer period, the wool will acquire an unpleasant yellow or brownish shade. Should the decomposition products be coloured, then the treated samples will look darker than the untreated control samples.

The comparison of various strengths is much easier with products of similar shades than with whitening agents differing in constitution and hues. As the strength depends on both the temperature of application and the pH, it is possible to compare different samples only if their method of application is known.

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* The concentrated whitening agents manufactured by Messrs. J. R. Geigy, S.A., Basle, Switzerland, are supplied in India by **Messrs. Amalgamated Chemicals and Dyestuffs Co., Ltd., of Neville House, Nicol Road, Ballard Estate, Fort, Bombay, 1.**

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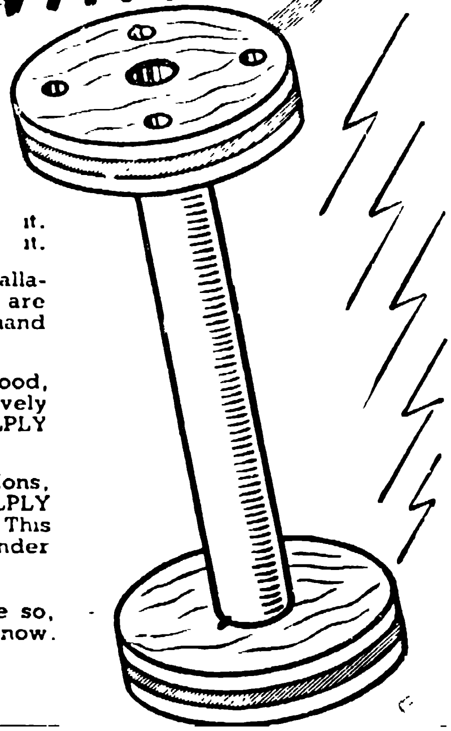

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"JUTE—THE MONEY CROP"

K. BOSE, M com.

IT is certainly the Jute mill industry, which has been hard hit by the partition of the country The mills numbering 104, are all located within the Indian Union. Yet 71% of the total Jute growing acerage and 72% of the aggregate Jute production of the country now lay in Pakistan As such, the raw material resources of the Indian Jute mill are now gone to a foreign territory There was a regular tussle over the supply of raw material and it was only in May 1948 that things came down to a settled position By the Inter-Dominion Agreement of May 1948, Pakistan agreed to supply India, 50 lakhs bales of raw jute annually For sometime the conditions of the agreement as regards supply of raw Jute, were carried out But afterwards Pakistan failed to keep the terms of the agreement, as various natural calamities affected that country In October, Pakistan revised her policy on raw jute export to India It was made obligatory on the part of the Indian Mills to buy a certain minimum quantity of raw Jute every month, irrespective of their individual requirements But this step of Pakistan was resented by the Indian industries, and the Government of India too, made it known to Pakistan, that this constituted a violation of the Inter-Dominion Agreement This pressure bore fruit at last, and Pakistan Government soon rescinded its decision and allowed the Indian mills to import Jute according to their own needs.

Inspite of these difficulties Indian Jute mills were in a position to produce more jute goods in 1948 than in 1947. The desire of the mill-owners to produce more; less number of strikes and lockouts; improved fuel position etc were the main factors for increased production Production at the end of 1948 totalled 1,048,983 tons as against 1,010,027 tons during the corresponding period of 1947. To this was to be added the production of 60,000 to 70,000 tons of the non-member mills of the I J.M A

The supply of raw material position in 1949 deteriorated in such a way, that most of the Indian Mills made huge losses The Position however changed to some extent in 1950, mainly due to the Indo-Pak Trade Agreement

1950 was a year of great tribulation for the Indian jute mill industry Devaluation of Rupee brought about a complete deadlock of Trade between Pakistan and India. Not much Jute was comming over to this part of the country. For these difficulties, the Government of India had launched a programme of Self-sufficiency as regards supply and production of raw jute.

For this particular difficulty of supply of raw jute, Jute Mills in India, all through the year, had to work with very low supply of jute materials, and sometimes the position became so acute that the mills had to suspend work for temporary periods

For a time, there was an *ad hoc* arrangement with Pakistan for the supply of raw jute. By the Indo-Pak Trade Agreement of April 1950, Pakistan agreed to supply, through her Jute Board, to the Indian mills 40 lakh maunds of Jute at specified price and on a specified date. On the other hand India agreed to supply 20,000 tons of jute manufactures to the Pakistan Jute Board. The date fixed for the fulfilment of these conditions was July 31, 1950. But Pakistan failed to do this as there was no agreed rate of exchange. As such it was not possible to open letters of credit in India easily. At the same time, the price offered by the Pak Jute Board to the growers was not at all attractive, to persuade them to disgorge their holdings. These were some of the difficulties, which prevented the Pak Jute Board to fulfil her pledge. So the date was extended to September 30. After the expiry of the Agreement Pakistan tried to renew it, but India resisted. As a result Indo-Pak Trade once again relapsed into a deadlock. Conditions continued until there was a fresh Agreement early in 1951.

These factors compelled the Indian mills to suffer a lot even after the conclusion of the Trade Agreement in April 1950. Raw jute stock position of the mills continuously went down, with consequent downward trend in production. Against an average monthly production of 77,000 tons in 1949, the average in 1950 went down to 69,000 tons. As production declined so also the export. The average monthly export during 1950 was only 4.47 lakh tons as against 5.3 lakh tons and 6.2 lakh tons in 1949 and 1948 respectively. The prices, supply and distribution of jute goods during 1950, were regulated by the Government, under the system of control. But the ceiling prices fixed by the Government were much below the actual foreign prices, and naturally blackmarketing developed. Controlled prices proved uneconomic for the mills, resulting in huge loss of profit. The price of jute goods went very very high in American market as a result of the Korean War, and there was an incessant demand in this country to remove the existing controls. But this did not materialise until early in 1951. 1951 was also a difficult year for the Indian jute mill industry. Though her production of raw jute increased still the scarcity of raw material continued to be felt. In March, 1951 the position was so critical that Indian mills had to suspend work for 10 days. But the position improved as a result of Indo-Pakistan Trade Agreement. Under the Agreement Pakistan undertook to despatch 3.5 lakh bales of raw jute at a fixed price on a Government to Government basis and an additional 6.5 lakh bales through ordinary channel. Pakistan further agreed to supply to India 25 lakh bales of jute during 1951-52 season. The condition on Indian side was to supply to Pakistan 12,500 tons of jute goods before the end of 1951 and a further 50,000 tons during the 1951-52 season. The brighter outlook of raw Jute supply led the Government to believe that controls over jute prices were no longer necessary and as such they were withdrawn in March.

The decontrol of raw jute prices, however led to a phenomenal rise in prices. This rise in prices of raw Jute had its reflections on the prices of manufactured Jute. This had its serious repercussion on U.S. market, for it had already stepped down her purchases from us. Moreover the U.S. Government had desired to fix the ceiling prices of all commodities in the early part of the year. Stocks of manufactured jute accumulated with the mills, which brought about a decline in prices. Thereafter the level of prices of manufactured Jute rose a bit higher as the ceiling prices fixed by the U.S. Government were just near the prevailing market rates.

But this fresh rise in prices had its retort from America, where slump in general price level, slowing down of stock-piling and rearmament programme, strong consumers resistence etc. brought down the price level. This decline in values made the production of Jute goods unproductive, and pressure came from the side of the industry for the abolition of export duties on jute goods. Because export duty not only hampered our market in U.S., but also markets of U.K. Denmark, the Philippines, Peru etc. etc. In these countries, substitute packing materials were more and more gaining ground rather than Indian Jute goods. It was a matter of great regret, that India Government took a long time to realise the anomoly of the situation created by the imposition of a specific duty on the export of jute goods. It was only in February 1952, that the Government of India reduced the export duty on hessian from Rs. 1500/- to Rs. 750/- per ton.

The industry worked on a basis of 42½ hours per week with 12½% of the looms sealed.

The following table will show the rise in the production of raw jute in the Indian Union since 1947.

	Total yield—lakh bales
1947-48	15.50
1948-49	20.55
1949-50	31.17
1950-51	32.92
1951-52	49.50

During 1951-52 many strange things happened in matters of Jute. From the boom period of July 1951, when the price of raw jute reached a height of Rs. 93/- per maund,—the price came down to only Rs. 23/- during June 1952. In course of 12 months, the price of Hessian fell from Rs. 92/- per 100 yards to Rs. 43/-. The long remaining export duty of Rs. 1500/- per ton, though was reduced, yet the Jute year, July 1951 to June 1952 was unique for its spectacular contrasts. But the year-end stock taking however was not so gloomy. The Jute-self sufficiency drive of India during the year was successful. Production estimated at 4.677 million bales exceeded the target by 3 lakh bales. Mills had enough supply of raw jute. The mills worked for shorter hours, not because of short supply of raw materials but because manufactured goods would not sell at a price they considered profitable The total receipt of Jute during the Jute year ended June 1952, was 6075 million bales, out of which Indian Jute alone accounted for 4.225 million bales, thus registering an increase of 50% over 1950-51 figure Pakistan only accounted for 1 8 million bales,—a figure 25% below the 1950-51 volume India's foreign trade during 1951-52 showed that jute industry played a better role in the export trade of the country during the year when compared with the two previous years. The total value of exports was Rs. 701.57 crores, and the share of jute manufactures was no less than 270.17 crores.

In spite of all these facts, Indian Jute goods have had in recent years serious reverses abroad particularly in American markets. Last year the situation was very critical. American comsumption of burlap was down by one third at 531 million yards. This was the lowest consumption of burlap in America since 1932. This however was an incongruous situation and the reasons were numerous; First, there was the high cost of raw materials—both cotton and jute. Prices moved up about four-times since 1940, but that of paper (which is now being used as a substitute of packing material) only twice. Secondly, there was the high cost of labour. Thirdly, the rather anomalous export duties on jute goods. It was in realisation of the fact that if the Indian Jute goods were to regain their markets abroad, then the prices would have to be rendered cheaper, that the Government of India, early this year reduced the export duties on jute goods. And last but not the least the productive inefficiency of the Indian mills due to obsolete machinery and plant.

The Government measure has failed to give full fillup to the American demand for Indian jute goods. Recently the top-ranking officers of I J.M.A., have finished their tour of U.S., with a view to study the condition of the American market and to devise ways and means for the revival of demand for Indian jute goods. I.J.M.A. is spending some $100,000 on sales promotion in the U.S.A But the Moncur Mission is perhaps a belated remedy. But still Jute has again returned to its competitive cheapness, and the stage seems set for a burlap cameback. The I.J.M.A's "Buy Burlap" campaign is aimed at the reversal of this growing trend away from burlap to paper and the protection of the industries, markets. Burlap bags are the cheapest packing materials and with some thirty commodities regarded as substantial users of burlap in U.S.A., the potential field for promotional activity is very large indeed.

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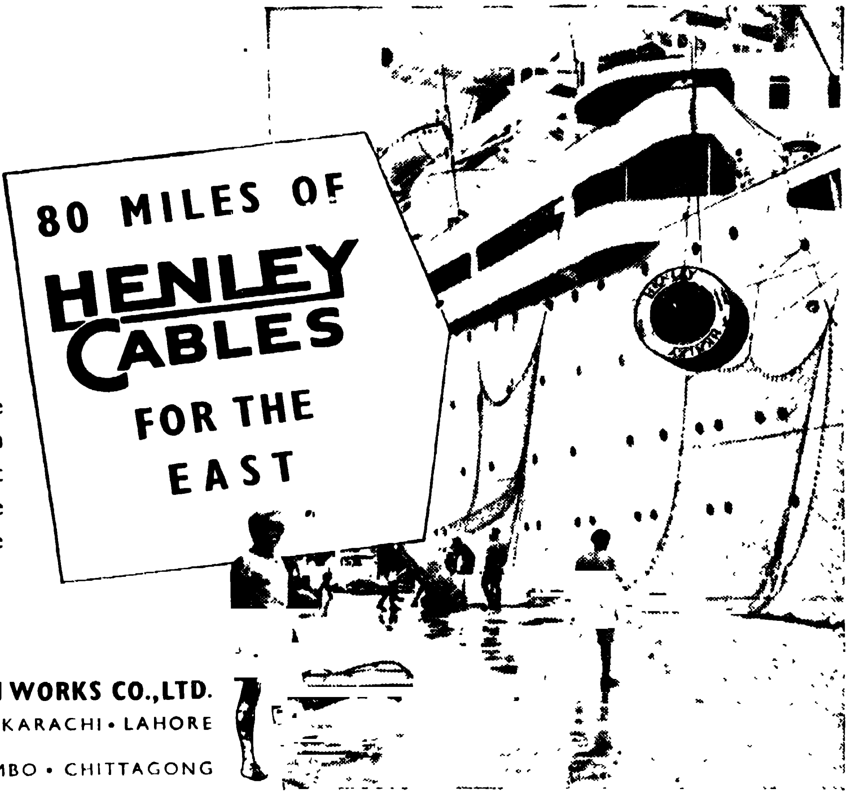

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TRADING IN GOLDEN FIBRE

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JUTE, the golden fibre of India has played a prominent part in the industrial and commercial development of the country In Bengal the jut plant has been cultivated from time immemorial and "Pattabastra", a type of cloth made from jute fibre, is a familiar reference found in ancient literatures The establishment of jute manufacturing industry in Bengal dates back to 1885 The machineries came from Dundee where flax spinning had already reached a standard of perfection Prior to 1885, hand-woven gunny cloth and bags were exported in quantity to Java and Borneo and Eastern ports The expansion of world trade opened further avenues for the jute trading and by 1850, Bengal exported her jute and jute goods to all important ports of the world

JUTE TRADING POSITION IN 1850-51.

Exports to countries	Jute Mds	Gunny & Gunny cloth
U. K	768,945	69,636
France	13,931	-
Hambarg	128	2,180
N. America	9,242	2290,427
C. of Coromandal	598	1955,150
Malabar	—	2054,075
Penang & Singapur	—	1043,600
Ceylon	—	357,290
New South Wales	54	32,125
Trieste	401	--
Java	—	242,550
Pegu	--	672,950
Mauritious	—	213,980
Cape of Good Hope	—	82,750
Guam	—	15,000
Arabian & Parsian Gulf	—	4,000

Total	Jute (mds)— 793,299 (Rs. Valuation— Rs. 1,970,915)	Gunny & Gunny cloth (Nos)—9,035,713 (Rs Valuation— Rs. 2,159,782,

The introduction of spinning machinary to the industry was first made by George Ackland, financed by Sri Bysumber Sen Since then the industry made a galloping progress. ousting foreign competitors and creating a monopoly world market for jute, manufacturing mills which now take up a stretch of over Sixty miles of the Hooghly

Recently, however, political and economic developments in the subcontinent of India and Pakistan, had seriously shaken the foundation of the industry Through the enactment of the Indian Independence Act, the country was divided territorially The Jute acreages were left in Pakistan while the mills were situated in the Indian Union Dependence on a foreign country for raw jute made the situation panicky which was aggravated by the absence of a longterm sound agreement between the two countries regarding jute, the mainstay of the economic structure of the two countries Production by the Indian mills decreased. Cost of production on the other hand, was substantially increased. Signs of a waning trade became visible. Moreover, the inventors of substitutes abroad, got an impetus as world demand for jute goods could not be fully met by this natural industrial fibre. In some spheres, paper and cotton bags replaced jute The situation was further worsened by the devaluation of the currency Both production and export of jute goods suffered a set back.

PRODUCTION OF GUNNIES (in '000 tons)

1948-49	1,081
1949-50	858
1950-51	892
1951-52	983

EXPORT OF GUNNIES (in '000 tons)

1948-49	872
1949-50	754
1950-51	547

VALUE OF EXPORT OF JUTE GOODS
(in Lakh Rupees)

	Hessian	Sacking	Total including others.
1948-49	8,400	5,819	14,656
1949-50	5,844	6,259	12,698
1950-51	5,437	5,335	11,389

The situation was improved to a great extent as proper attention was paid to the cultivation of jute. There was definite incentive to the jute growers as the price of the jute was simply lucrative.

COMPERATIVE PRICES OF JUTE & RICE IN WEST BENGAL
Harvest Price (Per Md of 82-2/7 lbs)

	Jute	Rice
1949-50	Rs. 34/9/-	Rs 20/11/5.

The result was that jute acreages increased to a substantial scale. The other side of the picture showed a relatively decreasing acreages in Pakistan jute cultivation. As that country tried to put the Indian mills at her command, consumption of her raw jute decreased and she was forced to contract her jute acreages

ACREAGE and JUTE
(1000 acres)

	1948-49	1949-50	1950-51	1951-52
India	834	1,163	1,449	2,000*
Pakistan	1,877	1,561	1,250	not available

*Rough estimate.

PRODUCTION OF JUTE
('000 bales of 400 lbs each)

	1948-49	1949-50	1950-51	1951-52
India	2,055	3,089	3,292	4,800
Pakistan	5,479	3,333	4,452	not available

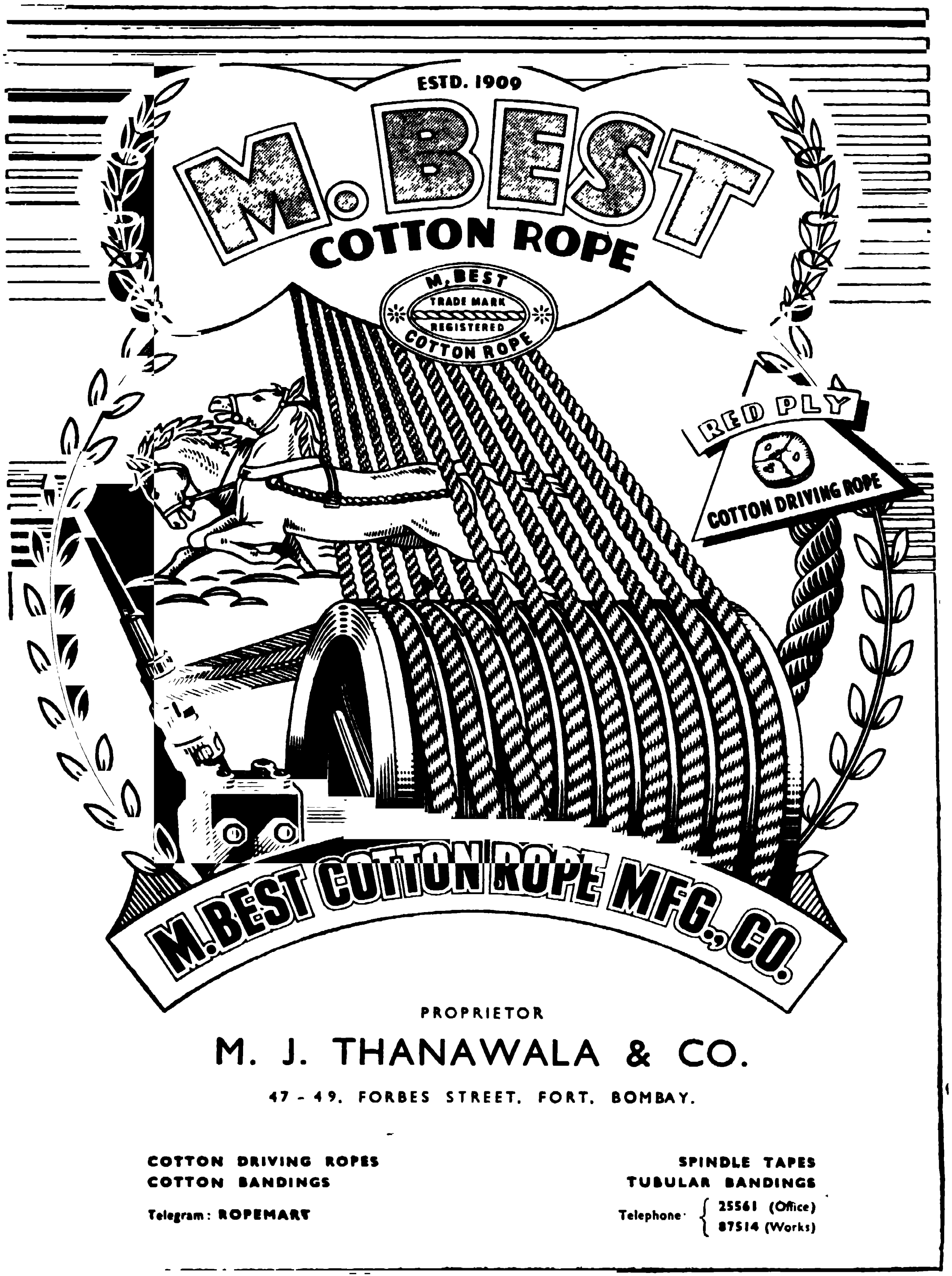
The recent Indo-Pakistan trade talks which began on July 23rd this year proved infructuous as far as jute was concerned. Pakistan adopted a discriminatory policy towards India in enacting a special licensing fee on raw jute erports to India. As a result, negotiation broke down. But the present position of the jute industry in India dispel all fear of any shocking effect from this unsuccessful negotiation as the raw jute supply from domestic sources is proving encouraging as well as steady.

Inspite of the fact that world demand for jute and jute goods have not been met fully, the export markets have not been replaced by substitutes. It is very difficult indeed to compete with jute for any artificial fibre as cost of production of such substitues failed to keep pace with the trend of price movement, when the moment was ripe for those commodities to prove into. This fact amply explains the position of jute in world market. Now it remains for the jute manufacturers in India to regain the slight loss experienced due to some unforeseen factors in recent three or four years. It is certain that with a flow of steady supply of raw jute, which is definitely promised in coming years, the price factor will be amply stabilised so as to afford jute traders a scope to expand their market to a considerable extent.

Thus price and supply are the two main factors which normally determine the position of jute industry. As for supply, cultivation of jute in a modern scientific method would enable to increase the yield per acre of jute. A general reduction of cost of living is also necessary to induce the cultivators to stick to jute cultivation. And ovserving a scrupulous economy in the factors of production of jute goods price can be controlled within reasonable limits. Marketing of jute in new channels, particularly where substitutes have entrenched themselves should be attempted, and new uses of jute and jute goods should be devised. To attain those ends, co-operation from the Government is essential.

Recently, labour movements in the sphere of jute factories showed an encouraging sign. Strikes and lockouts were less than before. A healthy trade union movement seems to be growing. The credit goes to the Government for its sound labour policies based on the lines of negotiation and compromise. It is now hoped that the labour force will be under the guidance of trained people who understand the business well and thus help to make steady strides in the field of jute trading.

A man who wants a chance may create it through action, but if he waits for someone to hand it to him on a silver platter he will meet with disappointment.



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SILK INDUSTRY

S. R. SAHA, A. B. T. I.

SILK is a fine filament extruded by the silk worm. This filament is spun about the worm itself in the form of an oval-shaped cocoon. The filament consists of two viscous threads of fibroine, cemented by sericine. The oval filament is formed when the whole matter come in contact with air The length of this oval filament may attain as much as 4,000 yards Only about one fifth of the cocoon consists of silk and of this only one half may be suitable for reeling into the continuous filament yarn known as 'nett' or 'mulberry' silk

From time immemorial silk is used for the finest apparel pleasing well-to-do people for ages and is prized to this day for its luxurious qualities It should be remembered that the use of silk goods was common only among the elites of the society Though the climate of this country favours widespread use of silk, the common people cannot afford to pay for such fine and soothing silk dresses Silk, in general, is confined to suit the occassions of celebrations

Until recently the silk industry all over the world enjoyed an unrivalled position In the inter-war period the demand for silk, especially for lower quality goods, was reduced or in otherwards replaced, as a result of the competition of rayon Rayon is a manufactured fibre made from a cellulose base obtained from wood pulp or cotton linters The impact of this competition was first felt in the early twenties. Since then the production of silk tended to decline, for people were switching to the new product which satisfied the desire of wearing fine cloth at a cheap price. This declining tendency was further accentuated during the war years of 1939-1946. There were many factors behind this aggravating situation. Firstly, food scarcity all over the world made people work for more food and labour grew scarce. Secondly, the cost of living index showed a sharp rise whereas the level of the standard of living exhibited a downward trend Thus the demand for luxury goods was most unencouraging. Finally the purchasing power of the community declined to such a horrible level that even essential goods were not sold in the market as could have been in the normal times The repurcussion upon the silk industry was so heavy that the annual output of raw silk fell from some 120 million lbs in 1939-40 to approximately 24 million lbs in 1945-46 The demand of silk as a war time material came so suddenly that producers could hardly think of The inevitable result was that a new substitute was invented for meeting war demand Nylon not only served the purpose well but also proved a superior quality as far as tensile strength was concerned

The postwar output of silk has shown only a moderate increase. World output in 1949 came up at a figure of 55 million lbs. Japan which was world's biggest supplier produced in 1949 only 25 percent of its pre-war quantity. India's production of raw silk in the post-war years was stationed between two and two and half million lbs per annum The most outstanding feature of the post-war period has been the reversal of pre-war days when the demand of silk was less than the supply Since 1948, the market for silk is showing a healthy sign

People who can afford for silk are not ready to change this habit and take to synthetic fibres. The vanity of wearing natural silk dresses is still there. For this reason, it is unlikely that silk will be entirely superseded by substitutes. Its quality together with its exclusiveness are sure to lure the upper strata of the society for years to come. It is hoped that in that period the work of reconstruction all over the world will show its result and will make people secured in life so that they may think of realising themselves in purchasing this fine piece of commodity. The International Silk Association founded at a meeting of eighteen countries in Zurich in May 1949 has as its aim the inauguration of a world-wide campaign to revive and expand the use of natural silk.

Main Silk Producing Countries

Prior to the outbreak of the World War II, the main centres of silk production were Far East and Central Europe. India, Japan, China, Italy, and Persia figured as topmost producers of silk. In 1939 Japan produced 98 million lbs out of a total world production of 120 million lbs. The figure of Japanese production stood at 12 million lbs in 1945 According to estimated budget of the five year programme of the Japanese ministry of Agriculture and Forestry, the figure should reach 35.7 million lbs mark in 1952. In China the situation was not at all encouraging Output fell from 10 million lbs in 1939 to 2 million lbs. in 1946, and further to less than one million lbs in 1948. The present position, as far as the available reports indicate, is showing signs of recovery. The Italian production figure tells the same sort of tale. In 1940 the output of cocoon was 77m lbs. The production fell steadily uptill 1945. In 1948, it was 21.0 million lbs. But as Italy has become a recipient of the European Recovery Programme, she hopes, with external help, to produce 66 million lbs of cocoon by 1952-53.

Production in India

According to the Tariff Board's Report (1938), the Indian Silk Industry was in a prosperous condition prior to 1875, with an annual production of 2 million lbs of silk. Between the years 1875 and 1915, the industry suffered a decline due to the destruction caused by the silk worm disease known as 'Pebrine'. Thence forward the silk industry of India flourished steadily and the prices of silk remained at a remunerative level till the year 1928 In conformity with recommendation of the 1938 Tariff Board, the Government of India granted certain measures of protection to the silk industry The protection came in the right moment when the industry was facing strong competition from foreign countries The Tariff Board had estimated in 1948, the demand for raw silk in India at 4 million lbs a year The present yearly production figure of raw silk is 2.2 million lbs

The principal silk producing areas in India are Kashmir, Mysore, Bengal and Madras Recently, the Government has shown the favour to the silk industry in bringing the industry under the direct control of Textile Commissioner It is expected that proper care will now be rendered

But as the demand for silk is highly elastic, the Government will have to make heavy subsidies to the industry for some years to come because the propensity to consume luxury goods is not expected to rise in the near future The free imports of artificial silk yarn and staple fibre yarns have also delivered a severe blow to the silk industry A sound tariff policy is urgently needed to safeguard the industry from these formidable hazards

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VERSATILITY OF BRITAIN'S SYNTHETIC FIBRES

BERNARD RIDGWAY,

(Specially Contributed)

A steadily widening range of apparel and industrial fabrics testifies to the scope and versatility of Britain's new synthetic textile fibres Many of these fabrics have only recently emerged from the development stage but already sufficient experience of wear trials has been gained to confirm that they set new high standards in their respective spheres

The twin set the girl is wearing is made from 100 per cent Terylene staple fibre Her scarf is printed Terylene, and all the other garments in the picture nightdress, swimsuit and girdle are made from Terylene filament yarn. The suitcase is covered with Terylene fabric. Terylene, which was discovered by chemists in Britain, is derived from by-products of oil and is marketed in the United States of America under the name of Dacron.

Some of the most outstanding developments centre around Terylene, a new synthetic fibre

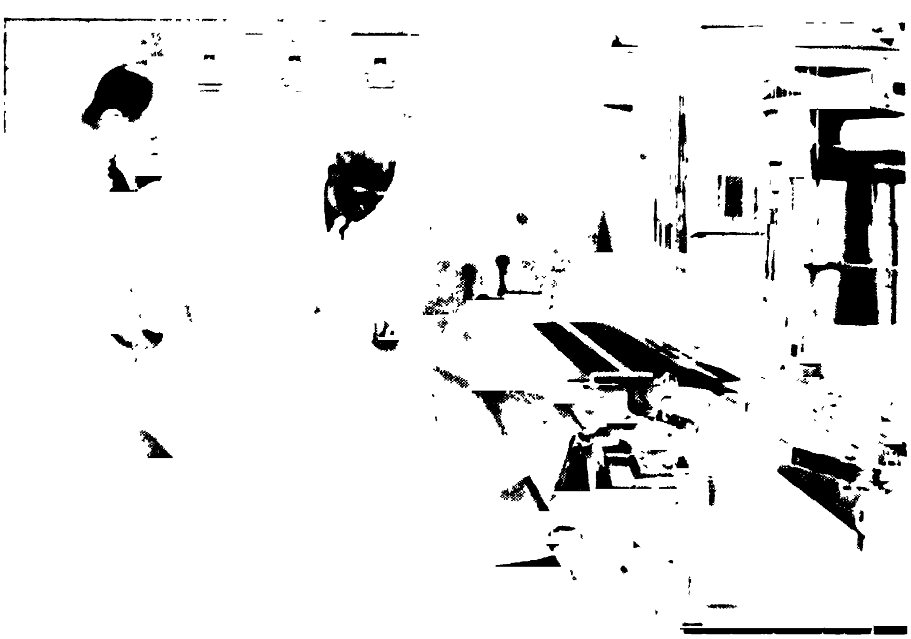
Shirts and blouses made from new Terylene knitted fabrics require little or no ironing—one shirt has been through 170 washings without ever the need for the iron—are highly resistant to creasing and dry with amazing rapidity

PILOT PLANT PRODUCTION

So far the sole output of Terylene in Britain comes from a pilot plant in Lancashire. This limited production is being judiciously spread over as wide a selection of textile and industrial interests as possible in order to find out Terylene's behaviour in manufacture and its suitability in various roles In certain spheres, development work has reached such an advanced stage that small-scale commercial production of some fabrics has already commenced.

now being undertaken indicate that it has especial merits for men's socks.

Terylene, latest in the series of purely chemical fibres, is derived from by-products of oil. This miracle of chemistry possesses many outstanding properties For instance, it has more than twice the tensile strength of cotton and retains its strength when wet It stretches little, and as it will absorb very little moisture it dries extremely rapidly Terylene fabrics resist creasing, retain their shape in washing and, like nylon, are heat-set to reduce shrinking and stretch.



Experts examining Terylene cloth woven on an experimental loom. Terylene, derived from by products of oil, was discovered and developed by chemists in Britain. Terylene staple fibre is made into warm textiles it can also be blended with both natural and synthetic fibres It is known in the United States of America as Dacron.

The mere trickle that represents Terylene output today will one day become a flood Imperial Chemical Industries are now erecting a plant for its manufacture at Wilton, in Yorkshire, which will have an output of 11,000,000 lb of Terylene a year, to be divided between continuous filament yarn and staple fibre

A big future is predicted for Terylene staple fibre, either on its own or in blends with wool, cotton or other fibres, both natural and synthetic On its own it will produce textiles with a warm, lofty handle and high wear resistance. Tests

PROTEIN FIBRE

Another of Britain's synthetic fibres is based on groundnuts This is Ardil, a true protein fibre that was first made in 1938

Ardil is a cream-coloured crimped fibre rather similar to wool. It has wool's warmth, moisture absorption and dyeing properties and so recommends itself as a blending agent for wool. Mixed with the coarser strains of cross-bred wool it adds a softening touch and produces fabrics with a kinder handle.

Ardil is now being taken up by the cotton and rayon industry in Lancashire When blended with viscose rayon staple Ardil introduces a warmer handle to lightweight dress fabrics and shirtings woven in various blends of the two fibres. The latest development in shirtings is a fine, closely woven fabric in a blend of viscose rayon, Ardil and nylon staple fibre. The rayon provides the bulk the Ardil a "wool-like" handle, and the nylon extra strength.

If a man has a trouble, he must wipe it out of his mind as soon as possible. Why ? Because he must get ready for the next trouble.

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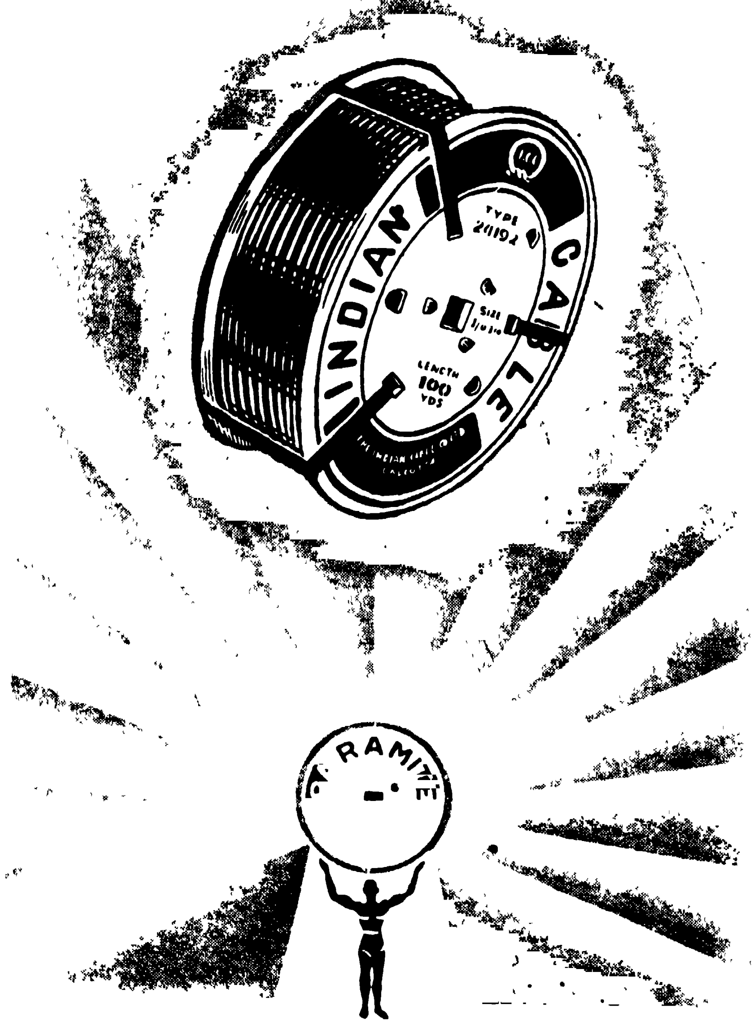

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FLAX INDUSTRY

M. L. HARKAWAT, A.T.I. (MANCH.).

FLAX and Linseed both belong to the same botanical group, 'Linum Usitassimum', and though linseed is grown extensively in India, the average acreage ranging from 4 to 6 million acres per year, there has been practically no Flax fibre grown in India. Flax also belongs to the best group of fibres like Jute and Hemp but owing to non-availability of the fibre in India, there was till recently no Flax Mills in India. One has been established in Rishra in the year 1948 and it is quite a significant coincidence that it should have been located in the same place where the first Jute Mill was established more than a century ago. Since the establishment of the first Jute Mill, much water has flown down the river Hooghly which has marked the prosperity of Jute Industry for the whole country. The first Flax Mill is also thus blazing a new trail and it is hoped that as there are hardly any Flax Mill in the eastern hemisphere, India which has taken the lead in the establishment of the Flax Mill will in course of time become a producer of Linen fabrics of repute and also establish an export market.

It will not be out of place to clear a lot of misunderstanding with regard to the term 'Linen'. Linen has of course more than one meaning but it should be strictly understood that when linen cloth is mentioned, it should be made of pure Flax fibre. As there are lots of fabrics made from spun fibre and other synthetic fibres going by the name of 'Linen', it is hardly to be wondered that most people ask for linen and get only Staple fibre cloth in place of real linen. It will be interesting to reveal the origin of this confusion created deliberately by the merchanting section of the trade, as Northern Ireland which is the home of quality Linen fabrics introduced 'Linen Spun' staple fibre cloth. In the United Kingdom, they took care to call it 'Linen Spun' as Staple fibre was easily spun on linen type machinery but in India the word 'Spun' was dropped, many people being unable to understand the significance. I have emphasised this point at length as we had a lot of difficulty in convincing people that linen from pure Flax fibre and linen from Staple fibre are quite two different things.

There are inherent difficulties in the cultivation of Flax fibre which explain the reason for the absence of Flax fibre in India. As explained above, linseed and Flax form the same group, there are two types of seeds and those which are suitable for oilseeds are not suitable for long fibre. Proper grade of seeds have so far been unobtainable in India and it is surmised that though various attempts have been made ever since the year 1906 by the Government of India, they have largely proved unsuccessful on account of graded seeds being not available. Apart from this, retting of Flax is a very intricate matter requiring deep knowledge of the subject and suitable training. It is beyond the means of a cultivator in India to undertake the retting work and no suitable personnel could be found to train our farmers.

Inspite of all these handicaps, the Flax Industry has made a start by importing raw Flax from Belgium, Holland and Egypt. Though Russia produces nearly 4/5th of the total Flax production in the world, she exports hardly any quantity and most consumers have to look to Belgium, U.K. and other Western nations. Flax fibre is imported in scutched form and the average strand may be 30 to 40 inches long. Each strand or long hair consists of fibre bundles which are cemented together by the natural gums and pectins. The average fibre length is roughly one inch.

There are two types of processes employed in the spinning of Flax—dry spinning and wet spinning. Roughly speaking, the dry process is employed for counts 8^s to 20^s lea (in the Flax counting system 1^s lea measures 300 yds per lb.) and the wet system is employed for finer counts as well as coarse numbers. In the wet spinning process, the rove passes through a hot water trough and during its passage in the water, the natural gums and pectins are solubilised thereby enabling the drafting action to take place between the spinning rollers.

In the Flax system of spinning, it may be said that the Carding machines, Drawing frames and Roving frames have a lot of similarity with the machines employed in Jute, Wool or spun silk system but what is most interesting and most ingenious machine that is peculiar to Flax is the Hackling Machine. Nearly all its operations are automatic except the hand feeding and the main function is that of combing the long bunch of fibres, thereby discarding the short fibres which are then spun in the tow system. After hackling, the long line of fibres are sent to the line system of spinning resulting in line yarns and the short fibres go to make up Tow yarns for Canvas, Cordages, etc.

The importance of Flax fibre lies in its high intrinsic strength, being the strongest natural fibre. It has also admirable swelling and a high water absorption properties. On account of these factors, Flax is almost universally employed for fire fighting Hoses and being strong and hard wearing, Flax Fire Hoses are cheaper and more durable in the long run. Similarly Flax threads on account of the high strength—always command an unchallengeable position in the leather stitching, sole sewing, army boots manufacturing and other stitching jobs. As stated above, Flax is water absorbing and is in its natural state waterproof to a certain extent thereby making Flax Canvas an ideal choice for Tarpaulins, Awnings, Deck-chairs and other hard resisting covering jobs. On the top of all these is the special handle and characteristic feel of Linen fabrics amongst which range high class linen suitings, beautiful damask table cloths, napkins, glass cloths, bed-sheets and other household articles.

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TEXTILE PROCESSING INDUSTRY AND ITS NEED

PRABHU V. MEHTA, B. Sc , M. I. I. Chem. E. D. I. C. (Lond.).

There is an old English edict that proof of pudding is in eating it. The same is equally true for manufacturing commodities, We are the third largest manufacturers of Cotton Textiles in the world Unfortunately we have not been able to exploit our manufacturing capacity to the maximum to suit the needs of discriminating consumers at home and of export market

Lately there has been a considerable rise in the volume of export trade in cotton textiles mainly in grey varieties Due to restrictions on the import of cotton textiles the consumers out of sheer necessity have to depend upon indigenously produced material but I have heard many consumers complaining not because they are forced to use Indian made material but it does not meet with their taste in finish, feel texture and shades. The same is true with the export market They prefer to buy grey for one reason or another and get the conversion done in other countries before it is sold to the consumers

Every right thinking man in the Industry has come to a definite conclusion that but for better finish the cloth manufactured by us will not command very good export market nor satisfy domestic consumers fully and, therefore, are diverting their attention in the art of textile finishnig.

Independent factories doing the work of Bleaching, Dyeing, Printing etc. play an important part and are classified as Textile Processing Industry. Since 1939 there nas been a rapid development in Processing Industry. Many new plants with modern equipment and foreign trained technicians have been installed to give the home and foreign buyers complete satisfaction and meet their demand.

Many manufacturing Mills have also developed their departments for finishing Textiles and have installed plant, machinery and equipment for conversion of cotton textiles

We manufacture fairly a large quantity of rayon textiles as well Conversion of rayon textiles is very important and our rayon textile have not been able to compete favourably in foreign market because of poor conversion.

The art of decorating Textile Fibre and ornamenting it with colors is very ancient The art of dyeing textiles with vegetable colour is so old that no reference conclusive enough is found to attribute its discovery to any one nation The Chinese and the Hindoos claim that the art of textile printing i e the application of colour on a piece of calico in a manner to produce a picture or design is due to them It would be beyond the scope of this article to discuss in detail the argument put forward by each Nation as to the original discovery and the development of the art of textile dyeing and printing but it can be safely accepted that the art of block printing of textiles was originated in India and at one time Indians were expert printers and Indian textiles found market and favour in Middle East, Germany and France.

How then we being the pioneers in the art of decorating textiles have become so poor in the art of textile conversion that discriminating consumers in a country has to rely on imported processed material to meet their requirements?

After careful consideration of all the Factors affecting the Textile Processing Industry I have come to the conclusion that the conditions obtaining in that Industry are not congenial enough to enable a converter to bring in maximum efficiency in the art of finishing. These conditions have to be remedied. Unfortunately the various State Governments and the Union Government have not realised the importance of having a well equipped, well organised and efficiently managed Industry of Textile Processors as every other country which aspires to be big producers of textiles has done In the operation of the Cotton Textiles Control Order the manufacturing Mills receive a favourable treatment at the hands of the Government than an independent Processor The ostensible reason generally advanced for this invidious distinction is that manufacturing mills produce cloth and therefore are entitled to preferential treatment It is never realised that Processor is also an equally important manufacturer in Textile Trade A Processor in fact is to a grey cloth what Diamond Cutter is to a raw diamond Moreover, he has specialised knowledge of conversion of textiles and devotes his entire attention to this aspect of business While a Spinner and a Weaver is essentially interested in the manufacture of cloth and devote most of his attention to manufacture of cloth

In India by custom, convention and conditions of living, the dyed or printed Calico is a necessity to all people For festivals and ceremonial occasions, gay coloured clothing is widely used We are a poor Nation and a large majority of us cannot afford the usage of comparatively expensive soap and other cleaning auxiliaries Living conditions are such that white clothing becomes dirty due to dust and mud and this necessitates frequent cleaning which the poverty-stricken people cannot afford The textile conversion to a limited extent develops soil resistance

It has been said often enough that a piece of printed calico is at once one of the most familiar, most useful and perhaps the most wonderful of all the products resulting from the practical application of human ingenuity to the service of man Its utility to the human society is second to none of the commodity that the Engineering, Science and Art has been able to produce in the field of domestic use and yet the finest of these fine examples of Calico Printing which bears the testimony to the height of human ingenuity of the application of science and art is not appreciated by the poople who have taken for granted the existence of printed calico. This single fact proves the immense popularity of printed calico It is realy a tragedy that such an industry which has large utility value to the masses has been neglected at the hands of the Government which claim to foster and assist industries It is not realised that in the production of Calico Prints the centuries of experiments, hundred years of devoted service of Chemists, Engineers and Artists have gone into Perhaps it is the familiarity that does not permit the appreciation but it should be realised that with the development of this Industry, we will have better Chemists, better Engineers and better Artists and on the whole Nation will be gaining knowledge and experience which will benefit in many other walks of life Even from this point of view this Industry is important It can give employment to Technicians, whose knowledge increases throughout their working life and that knowledge is spent and used for betterment of society This reason alone should be sufficient to warrant Government help for the Industry

Our Industry has been developed largely within the last 30 to 40 years and now employs modern machinery and equipment Before the war it had to face foreign competition from England and Japan Now that competition does not exist, but many other handicaps and restrictions have been put on the Industry which does not permit them a free hand to exploit the art which they have developed

The Industry of Textile Processors is also to an extent an essential industry inasmuch as that it can meet with most of the requirements of Defence Services in times of emergency as well as in peace—it was proved beyond reasonable doubt during the last World War when this Industry catered largely for our Defence Services as well as the Defence Services of Allied Nations

The importance of the Industry as a foreign exchange earner is also not appreciated By exporting processed cloth instead of grey we are likely to get between 30 to 70% more foreign exchange out of our export of cotton textiles In U.K the import of grey cloth is permitted but the import of processed cloth is prohibited and the imported grey cloth is processed and exported utilising the industry to earn foreign exchange, whereas in India the Government is not utilising the Processing Industry for the same purpose.

If the Industry is assisted and allowed to grow then it is capable of many developments to manufacture utility fabrics to meet the varied demand of modern civilization such as shower-proof water-repellant fabrics, fire-proof fabrics, month-proof fabrics, anti-shrink and, anti-crease fabrics and fabrics for furnishing materials, weather resistance fabrics, umbrella cloth etc. etc

Side by side another industry of major importance could be developed in the country i.e. manufacture of machineries necessary for Textile Processing Several firms have undertaken this job but their future is not promising Due to the restrictions imposed upon the Processing Industry such as Cotton Textiles Control Order, they find it difficult to expand their capacity, instal new equipments and thereby aid the indigenous industry of machinery manufactures Today except Calenders and few other machines that are needed by the Processing Industry almost all the machines are manufactured in the country by one firm or another. As Processing Industry is not assisted and allowed to expand, the scope for the development of this Industry of Machinery manufactures is also limited

It has also developed another industry which manufacture auxiliary products needed by a Finisher Even on a small-scale manufacture of dyestuff was started in the country but unfortunately it had to close down.

The country today has many Engraving Plants needed by printers for manufacturing copper rollers and there is scope for Non-ferrous Metal manufacturers to manufacture copper rollers which are needed in the Industry and have to be imported today.

With the growth of Processing Industry, the Industry of manufacture of coated fabrics has also developed in the country It can be said without fear of contradiction that this Industry is capable of meeting the country's entire requirements.

The Industry is training young Scientists, young Engineers and young Artists in the art of finishing and decorating textile fabrics and is playing an useful role in the development of society by serving as a utility industry

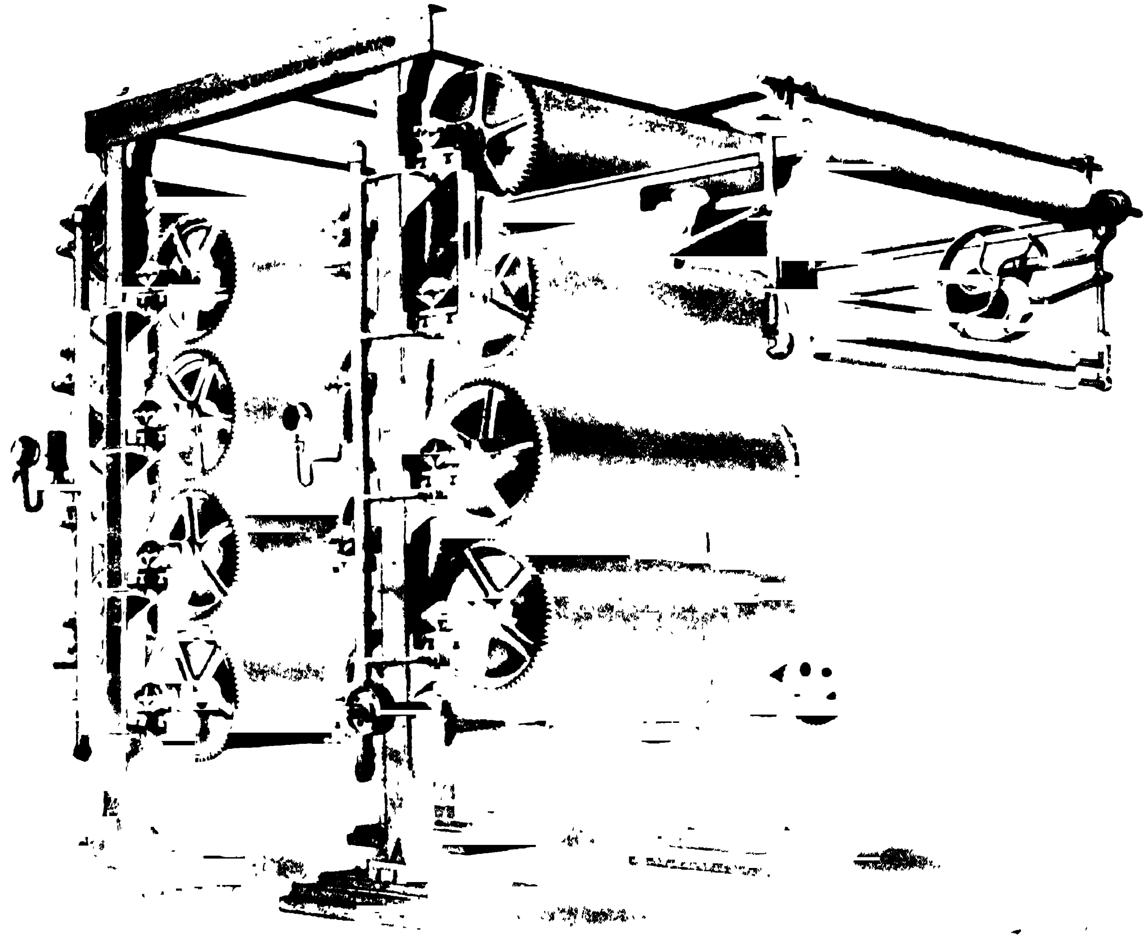
Several institutions in the country are training Textile Chemists and Textile Technologists.

Therefore it is easy to visualise that this Industry has a tremendous amount of potential capacity for employment and of serving society It can also assist in development of many other industries which are complimentary to the industry of Textile Processing

This Industry of Textile Processing is facing bad times now and if it is allowed to suffer or die a natural death then all the complimentary industries and their development will also suffer.

I close this article with a pious hope that an Industry which is in existence will not be allowed to die when we are planning for many more.

> *The money lost by carelessness and indifference is enormous, but the loss to character is greater still.*



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MODERN METHODS OF CONE WINDING AND LOOM BOBBIN WINDING WITH AUTOMATIC MACHINERY

R. E. HOPKINS

COMPETITION today can only be met by modernizing your mill equipment and methods of manufacture regardless of whether you operate a Textile Mill, build machinery like ourselves, or manufacture any of a million and one other items.

Many new fibers are being developed for commercial use in large quantities in the textile industry. New and more efficient machinery is continually being brought out, and new methods of operation tried out and adopted, all of which result in greater production efficiency, lower operating cost, and improved quality of the end product. Therefore, to overlook the advantages and savings to be accompanied by modernizing your mill with automatic machinery and modern methods of operation, means you will be in no position to meet competition in price and quality when the going gets tough.

As most of you already know, there is actually only one make of Automatic Cone Winder on the market today, being used extensively throughout the industry; but in reality, there are two different makes of large package Automatic commonly used, namely Abbott and Barber-Colman.

The Abbott Winder winds both cones and cheeses up to 8½″ in diameter with a 6″ traverse and weighing 3 pounds or more.

For Automatic Filling Winders, or Quillers as they are commonly referred to by most people in this country, the Automatic Machines used most extensively in the United States are Abbott, Whitin-Schweiter and Hacoba, with possibly a few scattered installations of other makes.

Now each machine regardless of whether it be a large package winder or a filling winder, may have its own distinct individual features, which might better adapt it to some specific application or mill, than some other make machine, but the same advantages and economies apply to all Automatic Winders in general, in varying degrees.

However, as I am best qualified to talk about Abbott equipment, I will confine myself largely to this particular make, with the exception of some references to the advantages of Automatic Winding in general.

Previous to the middle 1920's, winding or transferring of yarn from bobbins onto large packages was one of the most expensive operations in a Textile Mill, and this factor alone was what prompted the late E. J. Abbott and his brother to develop the Abbott Traveling Spindle Winder.

The moving assembly line principle of operation as applied to Abbott Automatic Winders has always been one of their main features, resulting in low-cost winding, since the work is brought to the operator, who remains in a sitting position at the end of the machine, with only two operations to perform, placing of bobbins to be wound-off in a rotary magazine, and doffing full packages.

Each traveling spindle is a complete winding unit in itself, which carries along a bobbin and winds the yarn from this onto a large package automatically as the units travel around an oval-shaped frame.

The speed at which the units move around the frame is such that the bobbin will become empty of yarn in one complete trip around, barring yarn breakage for any reason. By varying the length of the frame and the number of traveling units per frame, to compensate for variation in the number of yards per bobbin, the units are moved around the machine at a uniform rate of speed which is quite well established at 20 units per minute, passing through the automatic head, or 20 gross knots per minute, regardless of the size machine, which can be supplied in various sizes from 44 spindles to 222 spindles per frame

The Automatic Tie-in Head has three principal elements First, a suction nozzle and reversing roll, by which the package being wound is turned in reverse as it passes over the suction nozzle, thus picking up the loose end which is carried over into the knotter by means of a semi-circular suction pipe with a slit in the bottom of it The second element is a rotary magazine into which the full bobbins are placed by the operator and the loose end from the bobbin placed in a suction pipe As each traveling unit passes the Automatic Tie-in Head, the magazine turns, bringing the bobbin end into the knotter together automatically, and the bobbin released from the magazine into a bobbin peg or holder, attached to each traveling unit The third element is a blower which supplies the necessary suction to hold the threads in proper position until they are knotted together This is a centrifugal type blower, direct driven, with a fan mounted on the motor shaft, and the complete blower unit totally enclosed and built into the automatic head as an integral part of it.

Our standard knotter ties a Fisherman's knot, which is really two single knots tied back-to-back, and drawn up tightly together, making a very nice knot, quite similar to a square knot in looks It is located concentric with the yarn, the tails lay down close to, and parallel with the yarn, and this knot once tied is more free from slippage than any type of knot tied by a mechanical knot tier. These knotters are of single construction, compact and can be removed from the automatic head and replaced with a spare knotter in two or three minutes at such time as may be necessary for servicing, two knotters being supplied with each machine

The Abbott Traveling Spindle Winder is built to handle a wide variety of staple fibre yarns, such as cotton, wool, worsted, spun rayon, etc. It can be adapted to wind cones of various tapers, and also cheeses on either wood or paper cores as the mill desires, and wind equally well from bobbins with filling wind, combination wind or warp win. The automatic head is made to handle practically any type of bobbin from 5 inches to 12 inches in length and from any size ring up to and including 3¼ inches.

Winding speeds are limited in general by the speed at which the yarn can be taken off over end from the supply bobbin These speeds usually range from around 500 yards per minute, to approximately 800 yards per minute, although 625 yards per minute is most universally used for most types and counts of yarn

As I have previously mentioned, the units travel around the machine usually at the rate of 20 per minute, or 1200 per hour, and making liberal allowance for room loses, knotter failures, cleaning, oiling, etc up to 950 knots per hour can be averaged throughout the week, on one machine, with one automatic head and tended by one operator

On this basis, in the average cotton mill with approximately 15% reties due to slubs, etc the production from one Abbott Automatic Winder tended by one operator, winding from a 4-ounce bobbin, would be 200 pounds per hour, and winding from an 8-ounce bobbin, the production would be 400 pounds per hour. The production from other size bobbins would be proportionately the same for most cotton yarns, where the reties are around 15%, if these are inspected during the winding process, and of course if there is no inspection at this point, the production would be even greater

Since conditions vary greatly in different mills, we have not attempted to standardize bobbin handling equipment to and from the winder, but in order to assure an adequate supply of bobbins for the winder at all times to assist in maintaining this high rate of production in the most efficient and economical manner, we brought out the Abbott Automatic Yarn Hoist, which is placed adjacent to the Automatic Tie-in Head in a position most convenient for the operator to reach this supply of full bobbins, and place them in the magazine of the automtaic head with a minimum of effort and least number of motions. This piece of equipment consists of a large steel hopper which will hold 2000 to 3000 bobbins or more depending on the size of the bobbins. When the yarn is delivered to the winder, the bobbins are dumped into a steel lift box of approximately 6-cubic foot capacity resting on the floor, and attached to the hoist with steel cables. A switch is thrown and the load of bobbins is lifted up by means of a small electrically-operated winch, bobbins dumped into the hopper, and the box returned to its normal position on the floor, all automatically.

At this point I would like to explain to you a complete cycle of the supply bobbin, from the time it is taken from the hopper, full of yarn, travels around the frame, and returns to the same point, empty of yarn, ready to be returned to the spinning or twisting room as the case may be.

The operator remains seated at the drive end of the winder in a position easily accessible to both the supply hopper and the automatic head, a chair being supplied with each machine. The operator picks up a full bobbin from the supply hopper, finds the loose end and places it in a suction pipe with one hand, as she drops the bobbin into an empty cell of the rotary magazine with the other hand. This operation is accomplished with three motions, all in a matter of seconds thus permitting the operator to handle bobbins in this manner, consistently throughout the week at the rate of 20 per minute, or 1200 gross bobbins per hour.

As the traveling winding unit passes through the automatic head, the cone or cheese being wound is lowered onto the suction nozzle and rotated two or three complete revolutions in an unwinding direction, the loose end is picked off the surface of the package by means of suction, and carried over into the knotter through a semi-circular suction pipe with a slit in the bottom of it. The rotary magazine is timed to rotate at the same time and bring the bobbin end into the knotter to coincide with delivery of the package end. The two ends are then knotted together automatically, the bobbin released from the rotary magazine and deposited on a bobbin peg or holder attached to each traveling unit.

There are long driving rolls, approximately 2 inches in diameter extending the entire length of the frame on both sides. These are made up of sections approximately 10 inches long, are fastened together with semi-flexible couplings to take care of a slight misalignment, are supported from the frame at each joint, and run on ball bearings.

After the Traveling Unit with a new bobbin tied in, leaves the automatic head and reaches the driving roll extending along the left side of the frame, the cone or cheese to be wound is lowered onto the driving roll, thus the winding process begins and continues as the traveling unit moves along the side of the frame down to the opposite end where the package is raised up off the driving roll as the unit passes around the end of the frame, and is then lowered down onto the driving roll on the other side of the machine, where it continues winding until the traveling unit gets back to the automatic head, by which time the bobbin has become empty of yarn, barring breakage for some reason.

The empty bobbin is then plowed off the bobbin peg onto a canvas belt conveyor which carries the bobbin past the operator and deposits it in a box type truck, or other suitable container ready to be returned to the place from whence it came. As the bobbins pass by the operator, if a bobbin comes back with yarn on it, the operator simply removes this from the conveyor, places the bobbin in the rotary magazine again, and the rest of the yarn is wound off as it goes around the frame a second time.

Most all cotton mills wish to inspect their yarn, and since this can be accomplished most economically on an Automatic Winder during the winding process, we are prepared to supply a very efficient, fool-proof, self-cleaning, precision made slub catcher in various sizes to suit the requirements of the individual mill.

With the cost of winding reduced to such a low level by means of Abbott Automatic equipment, some processes involving winding are now possible which could not be previously considered from a standpoint of economy, due to the high cost of other types of winding, and probably the most notable example of this is the inspecting and winding of filling yarns from the Automatic Quiller in all the more progressive cotton mills, which are fast switching to rewound filling

AUTOMATIC QUILLERS

Just before the turn of the century, the average work load for a weaver in most cotton mills was six looms. In those days the looms were hand operated, and the shuttle had to be threaded by sucking the thread through the eye of the shuttle, but the hand-threading shuttle soon made its appearance and the weaver did not have to swallow the customary yard of thread any more

Then came the Automatic Loom, and by 1910 around 35% of the looms in the cotton mills of the United States were of the automatic type, and the work load was increased to an average of 50 to 60 looms per weaver, depending somewhat on the fabric

Next came the High-Speed Loom, and this is where Rewound Filling and the Automatic Quiller make their entrance The high-speed loom requires better wound bobbins to prevent sloughing in the shuttle, and bobbins with greater yardage to run longer in the loom

This is an example of the advancement that has been made in looms in the first half of the 20th century, and as its contribution toward further advancement in this branch of the industry, the Abbott Machine Co, Inc, offers one of the most efficient and economical methods of producing rewound filling—the Abbott Automatic Quiller.

In the production of textiles, one step is the winding of yarns from packages onto bobbins for use in loom shuttles. Machines have long been available for winding the bobbins, but all have required too many operators Various automatic devices have been used on these machines to increase production and reduce the amount of hand work. However, with rising production costs, the need to further simplify operations and reduce costs has become extremely critical.

In answer to this need, the Abbott Machine Co., Inc., has developed a simplified winding machine which accomplishes most of the formerly manual tasks with one automatic device. Essentially the machine is a moving-assembly line, since the individual winding units or spindles are moved around a closed loop conveyor and when fully wound pass through a stationary automatic head, which doffs the full bobbin and reloads the winding unit with an empty bobbin With this combination of an automatic head and moving conveyor, the number of operators is reduced, and the only tasks required of the operator, who can tend from one to four machines, is to tie in the supply packages and occasionally piece up a broken end. Loom bobbin production with this machine is increased to over two thousand bobbins per hour per operator in many cases

The machine consists of a stationary frame with a chain type conveyor running around an oval shaped frame From 40 to 200 individually motor-driven traveling winding units are connected to the conveyor, depending on the size machine desired Power for the winder motors is picked up by brushes from bus bars mounted on the stationary frame

All necessary gearing, as well as a cam to give a reciprocating motion to the thread guide bar is contained in the individual traveling winding units The automatic head which is incorporated into the machine is a mechanical device which doffs full bobbins and feeds empty bobbins to the winding units by means of a bobbin feeding mechanism from a large supply hopper holding 2000 to 3000 empty loom bobbins

Individual motor drives for the winding units were chosen to obtain overall flexibility and simplicity, and to eliminate dirt and oil. With individual drives, machines can be easily built with any number of winding units to accommodate different capacity requirements

Practical operation of the winder requires that the spindles rotate at approximately 3600 revolutions per minute for most cotton yarns, and approximately 5400 RPM for rayon and other synthetic yarns to obtain best quality loom bobbins, low cost operation, and greatest operator efficiency. The motor finally used on both types of machines is a 2-pole, 3-phase induction motor rated at about 40 watts, or approximately 1/20 HP, running on 44 volts, and 60 or 90 cps.

Only four moving parts on each winder unit drive the bobbin, and transmit a reciprocating motion to the thread guide, as each motor is built into the unit as an intergral part of it.

In addition to the reciprocating motion, some method is needed to advance the thread guide along the rod after each oscillation, or to-and-fro movement of the rod, to prevent build up of the yarn in one spot

Two methods of advancing the thread guide were developed to suit the type of yarn to be wound On standard cotton machines, the thread guide is advanced through the action of a feeler, bearing on the bobbin On rayon and other synthetic yarn machines, advancement of the thread guide is made by an overhead track cam, since it is desirable not to touch the yarn with a roller or feeler

When the bobbin is empty at the start, it is necessary first to wind a reserve bunch for the automatic loom This is done by limiting the movement of the thread guide by confining the post on top of the thread guide between two parallel guide bars, and the length of the bunch is governed by the length of travel time the thread guide movement is confined, or directly by the length of the outer guide bar

The automatic head of which there is only one per machine, regardless of the number of traveling units per machine, is of the most simplified design, and yet it is very efficient The empty loom bobbins are dumped into a steel lift box located conveniently at the operating end of the machine, and attached to the large supply hopper by means of steel cables, and a small electrically operated winch powered by a 1/2 HP motor.

You simply throw a switch on the side of the hopper, the box of bobbins is hoisted up, dumped into the large hopper, and the empty box returned to its normal position on the floor in a matter of seconds with no more labor than is required to throw the switch The bobbins are then picked up butt foremost and fed individually to each traveling unit as it passes through the automatic head, being held firmly in the unit between hollow centers instead of on a spindle. After the reserve bunch is built, the loom bobbin is completely filled with yarn as it travels around the frame, and when the individual traveling units get back to the automatic head, the full bobbin is doffed and placed on a canvas conveyor belt which delivers the full bobbins to whatever type container is used to convey the loom bobbins to the weave room.

On our standard cotton type machines, a conveyor can be had with four or five positions, which will sort out bobbins of different colors or styles and deposit them in individual containers On conventional rayon machines a conveyor is supplied, having a 6-inch wide canvas belt, on which the full loom bobbins are laid side-by-side, so the operator can inspect them as she picks them up to place them on pinboards or stack them in boxes, which is necessary with rayon to prevent soiling the yarn

One of our more recent development is the Abbott Automatic Pinboard Attachment, which eliminates all hand work and automatically places the full loom bobbins on pinboards as they are received from the winder The pinboard attachment is designed to hold seven empty pinboards in a magazine, and the roller conveyor on which they roll away as they become filled with bobbins, accommodates five full pinboards, which affords ample time for one filling carrier to take care of a large installation of Abbott Filling Winders, as each pinboard holds 80 or 96 full bobbins, whichever the mill prefers.

Rewound filling has always been used in the filament rayon branch of the industry, but until recent years, rewound cotton filling was almost unheard of except in heavy fabrics requiring plied filling, until the advent of the Automatic Filling Winder, because of the excessively high labor cost involved, but now all that is changed.

In this day and age of high cost of materials, high labor cost, high this and high that, coupled together with the fact that the public has become quality conscious, because of the high price tag on the fabrics they buy, the Automatic Filling Winder or Quiller is practically a must in all branches of the industry to meet cmpetition in price and quality.

Rewound filling aside from producing a higher quality fabric has many other advantages which more than offset the cost of this added operation, such as; greater flexibility in spinning, inspected filling, increased yardage on the loom bobbin, and fewer seconds

Mills who rewind their filling, normally use one size and type of spinning frame, and spin all their yarn, both warp and filling on the same size frame, with the same size ring and all on the same bobbin, which keeps their spinning in better balance, and gives maximum flexibility in changing from one style to another, requiring more or less filling with relation to the same amount of warp yarn This anables the mill to allocate a uniform work load to their spinners and doffers, on both warp and filling frames, running the same count yarn, and also elimination of the small ring filling frames

Another advantage is that by spinning the filling on a large bobbin and coning the yarn ahead of rewinding, close inspection of the yarn is permitted, which is not possible with direct spinning, thus obtaining an almost perfect filling yarn, resulting in a better running loom job with fewer loom stops and increased production.

By rewinding the filling, it is possible to put 25% to 50% more yarn on a loom bobbin having the same diameter, as the yarn is packed much more firmly on a rewound bobbin than when direct spun, resulting in a longer running time in the loom, fewer broken picks, more looms per weaver, and fewer battery hands, as well as less filling carriers

The net result of all these advantages is directly reflected in the number of seconds made, which are materially reduced by the use of rewound filling which is generally conceded to be the greatest saving of all There are also other so-called hidden savings which are hard to figure out on paper, but all the most progressive and up-to-date mills whether now using rewound filling or not, admit they will have to, in order to meet competition in price and quality

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TEXTILE LUBRICATION AND ECONOMY

A. V. MOSES

INDUSTRIALLY, the potentialities of India appear to be most promising in the field of textile production, especially cotton textiles A home market that is considerable had enabled *entrepreneurs* of the industry to build a nucleus that has grown to such a size that it could, at one time, cope with demands when the normal pre-war sources were not available Admittedly, this state of affairs had led to control with its resulting profits for the industrialists, yet there was no contesting the fact that India was also supplying much of Asia's cotton textile needs

Conditions, since then have changed to the point that controls, in respect of fine and medium qualities, have been lifted and the industry is now faced with the prospect of falling prices in a market which is no longer a preserve for the seller Under these conditions, it has become necessary that more attention be paid to economy of production without impairing the quality of the finished goods.

Lubrication, to many a mill owner means nothing more than a liability in the shape of bills from oil companies With such an attitude a mill owner may well be justified if he were to consider purchases only from that supplier whose rates are lowest. There is rarely an instance of such a mill-owner who considers the various conditions that are peculiar to the textile industry and takes into account the savings that are had with correct lubrication Of course, reports of surveys made by an oil company is often treated with suspicion for "are not such reports but another method of getting us mill-owners to buy what the oil company wishes that we do?" There is the case of the odd factory owner who employs a ***lubrication engineer*** but such an employee, not being productive, in the accepted sense of the term, is the first one to be "axed" when the recession, in prices and profits, sets in—just when the lubrication engineer is most needed.

POWER CONSUMPTION:

Spinning machinery work at high speeds as compared with the operating speeds of similar machinery of the past Yet, no step in the development of textile machinery to the present standards of efficiency could be taken without first combating the appropriate lubrication problems Refined Petroleum lubricants were not generally available till almost the end of the last century and prior to that time, fatty oils were universally used Bearing clearances of those days were comparatively large and for such bearings vegetable oils were satisfactory upto the time when such lubricants turned rancid and oxidised with the formation of gummy deposits—a state of affairs that was inevitable with the use of fatty oils Following the introduction of petroleum lubricants with their inherently good oxidation stability, rapid progress was made in those features of design and operation which permitted increased production of high quality materials at higher speeds

Today, in any textile mill, tens of thousands of spindles are required to work at speeds of thousands of revolutions per minute. Lubrication is essential to keep power consumption down to the minimum; the danger being that the slightest increase in power required by one spindle could be multiplied to an abnormally high figure The selection of a suitable spindle lubricant calls for care and even caution Although anti-friction bearings are becoming more popular for textile machinery, the plain bearing still predominates and it is this type which usually presents the greatest opportunity for saving through lubrication The problems of textile mill lubrication can be classified under two main heads—(a) Type and nature of machinery (b) Personel to whom is entrusted the lubrication of textile machinery.

(a) *Type and Nature of Textile Machinery*

The textile industry, in India, was wholly dependent on machinery supplied by foreign manufacturers. Recently, machinery of indigenous manufacture have come on the market but, the emphasis is on the duplication of textile machinery of foreign manufacture and, of course, on immediate profits To a large extent, post war import difficulties have been responsible for this state of affairs Yet, Indian manufacturers could have concentrated on machine design with the object of improving textile machinery and thus have established themselves in the home market, after which they could easily have made attempts to invade the markets of the world Textile mill lubrication, then, is faced with a number of problems mainly on account of the fact that up-to-date precision methods are not employed in the manufacture of textile machinery Parts, which could be improved in design or finish or both, fall in one or more of the categories named below: —

(I) *Types of Bearings and fits*: Surface finishes and fits must be ideal for lubrication to be economic and efficient. Strangely enough, even in the case of foreign manufactures, the majority of parts on textile equipment have a comparatively rough surface finish These are the days of close tolerances; take for instance, the products of the motor car industry · engine oil, specified by some manufacturers, are 3 to 4 times thinner than that recommended formerly because clearances of engine parts are becoming increasingly small. Obviously, bearings and other surfaces should be tooled to closer tolerances consistent with adequate fits.

While mechanical applicators are encountered in all types of machinery, no such devices are found in textile mill machinery. There are few cases of pin bottle oilers used to supply lubricating oil to the main cylinder bearings on carding machines, but the writer has yet to see such or similar devices in Textile Machinery in India.

(II) *Bearing Seals*: Textile machinery manufacturers are fully aware of the nature of bearing fits and rough surfaces produced by them While they are acquainted with knowledge that indicates, lubricant application shall be of such a nature that lubricating oil remain in the bearing at all times, yet there is little or no provision made for sealing textile machinery bearings

Obviously, the manufacturer is not wholly to blame for Indian Textile Mill operators have not yet recognised the need for such bearing seals The situation calls for action on the part of both manufacturers of textile machinery and textile mill management, separately and in collaboration with each other Manufacturers should redesign present machinery with sealed arrangements for adequate lubrication under all conditions Having once taken this initial step, the manufacturer should stress the importance of lubrication, emphasising the fact that former defects have been rectified Textile Mill operators should consider maintenance of machinery just as important as production and include lubrication as an indispensible part of all maintenance practice Provision of proper staff and equipment then becomes a necessity Employment of competent staff, who will search textile machinery and adapt standard oil seals to all possible bearings, should pay its dividends in the form of higher production, lower operating costs and, a very important consideration, less wear and tear of textile machinery

(III) The majority of gears of textile machinery are open and these have to be lubricated manually. Modern lubrication practice in regard to gears, favours either bath lubrication or a system whereby the lubricant is splashed on to gear teeth. The manual method of applying lubricants results in conditions best described as "feast and famine" and, the wear, during the period when little or no lubricant is present, is excessive. Gear wear can be reduced by the use of lubricants of high film strength and tenacity rather than the straight mineral oils and greases which are selected mainly on account of their low prices.

(b) *Personnel*

There has been continued neglect, on the part of textile mills, of lubrication of textile machinery. A Spinning or Weaving Master is usually responsible for the selection of lubricants and for their application to machine parts. Such technicians are primarily concerned with production methods and evolving technics relating to textile goods Consiquently, the maintenance of machinery is a secondary matter to them, nor will they ever be concerned with the different aspects of lubrication, the study of which would involve neglecting their main duties

Oilers are usually classed as unskilled workers and mills place such workers in the lower wage scales A fitter with his back ground is more suited to carry out the job of lubricating machinery besides, a fitter is more receptive of training in the proper application of lubricants

Abundant applications of lubricating oil does not result in proper lubrication which, to be ideal, has to be controlled Only by knowledge applied to textile machinery can controlled lubrication be achieved In the interests of proper lubrication each textile mill should adopt the following methods: —

(1) Training of supervision and lubrication personnel in the principles of lubrication Oil Companies, while aware of their responsibilities, find that there is little or no response to their offers of assisting mills in training personnel. Obviously, the oil supplier concerned with selling at competitive prices has not considered this aspect of his duties and the danger is that new comers to the business, ignore lubrication altogether.

(2) Study and selection of proper lubricants for each machine. Only those oil companies with the requisite experience can be of assistance on the subject.

(3) By carefully conducted tests, decide the maximum frequency of application of lubricants.

(4) Incorporate latest methods of lubricant application in textile machinery lubrication.

(5) Call on oil companies to advise on the proper storage and handling methods of lubricants.

(6) Take into account the savings resulting from mechanical application

The time has come for management to take advantage of the experience of reputed Oil companies and emphasise on larger economies in place of the shortsighted policy of passing business to suppliers who quote the lowest rates.

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AUTOMATIC LOOM

A. K. DAS GUPTA, B. Sc. (Cal.), B. Sc. Tech. (Manch.),
A. M. C. T., A. T. I. (Manch.).

LOOM is a mechanical contrivance for conversion of yarn into fabric by interlacing a longitudinal and transversal threads The machine synchronises three primary motions and several secondary motions and some preventive mechanisms

The primary motions are firstly the oscillating of the sley carrying the reed through which the warp yarn is dented, for beating up the weft to the fell of the cloth Secondly the picking motion for throwing the shuttle carrying the weft through the shed for laying down the pick in the shed Thirdly the shedding mechanism for separating a set of warp yarn by raising a group of healds or heald staves thus forming a warp shed by means of Tappets or Dobbies or Jacquards The cloth is woven by picking and beating up the weft in the alternate shed of the warp.

The secondary motions are the mechanism for taking up the cloth on to the cloth on to the cloth roller, the letting off i e the releasing of the warp from the weavers beam as the cloth is being woven There are also other motions like the warp Stop Motion for the purpose of stopping the loom when warp is broken and the Weft Stop Motion to stop the loom when weft is missing from the shed

There are few other devices known as preventive mechanism or the safety device such as Fast and Loose Reed Motions, to stop the loom when shuttle is trapped in the shed and the swell of the shuttle box which stops the loom if the shuttle is not returned to its proper place.

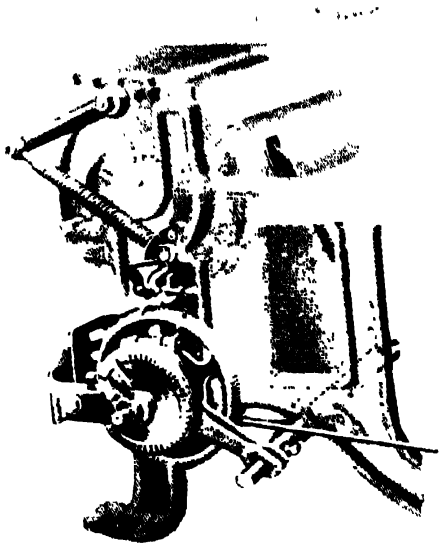
Efficient working of a loom depends on the correct tuning that is on absolute synchronisation of all the above mentioned motions. Once the loom has been correctly tuned the weaving cloth goes on smoothly.

As a result of the demand for more and more automatic operations of the loom the modern loom is becoming more and more a machine in its true engineering sense with the complexities in the design of its mechanical features. A loom is defined as an automatic loom when the replenishment of weft is performed automatically by the help of an automatic replenishing mechanism of weft from the magazine carrying weft pirns or shuttles, indicated by the weft feeler when a pirn or a shuttle changing is needed. The idea being to release the weaver from this work and keeping him to do other works where human assistance is necessary. With the same idea in view the automatic Let Off Motion was introduced So that the mechanism would automatically release the warp yarn from the weaver's beam keeping tension of the warp constant as the beam decreases in diameter, without any assistance from the weaver. The weaver thus relieved of doing this work also can spend more time for mending broken warp and weft and other essential work and look after more number of looms than what he could with ordinary type of looms.

The weft feeler motion and the warp stop motions are also essential devices in an automatic loom for automatic replenishment of a pirn or shuttle and not allowing cloth being woven with broken ends thus producing better cloth in an automatic loom. The weft cutting motion is also incorporated in the automatic loom to sever the weft from outgoing bobbins at the transfer and to hold the severed end of the filling until it is cut by the temple cutter close to the selvedge.

There are two types of automatic looms, the Pirn or Bobbin Changer and the Shuttle Changer type. The changing of bobbin or the shuttle may be effected either mechanically or electrically. In the bobbin changing system the mechanism puts in a pirn from the magazine to the shuttle and ousting at the same time the empty bobbin from it. In the shuttle changing system the shuttle with the exhausted bobbin is ejected and a new shuttle inserted from the magazine in its place The Bobbin changer type is generally used for less delicate (medium or coarser) count weft whereas the shuttle changer is used for more delicate count weft and for rayon and silk cloth

The next important mechanism in the automatic loom is the automatic Let Off Motion which may be of positive type or of controlled negative type The positive type of Let Off Motion like a Roper type or Bartlet Type (i e worm type) is mostly used in the automatic looms. The Bartlet Type usually adopted for heavier type of cloth



This motion (the Roper Type) releases an equal amount of yarn by increasing the revolution of the Warp beam with the decrease in yarn on the same. The motion is transmitted from the Sley Sword to the connecting rod then in sequence to the ratchet wheel and pinion which revolves the beam flange to let the warp yarn off the beam. The control of the force is vested in the strong spring attached to the back rail lever, as the stronger the spring is made the less is the movement made by the rail and the pawl. The warp beam feeler pressing against the warp on the beam also regulates the release of the yarn from the beam As the warp decreases in bulk, the feeler moves nearer the empty beam and the rod which is the fulcrum of the feeler increases the leverage of the pawl control lever and thus makes the warp beam move quicker The combined action of the spring control and the beam feeler causes the regular release with uniform tension of the warp yarn throughout the weaving of the beam the same being one of the most essential factors for producing good cloth Thick and thin places in a cloth occur on account of uneven tension and irregular release of the warp The tension variation also causes variation in crimp which makes it difficult to give the fabric mechanical shrinkage treatment required to prevent shrinkage or extension during subsequent working and in laundrying The positive Let Off Motion is normally adopted by almost all the manufacturers of the automatic looms The Japanese looms (like Toyoda and Sakomoto looms) are fitted with Controlled Negative Types of Let Off Motions where in the weight and the spring is set only at the beginning of weaving of a particular beam and no further human assistance is necessary for maintanance of the uniformity of tension and regularity in release of yarn till the beam is exhausted

The Warp Stop Motion which is essential in an automatic loom is for the purpose of weaving good cloth without any broken end The function of the warp stop motion is to stop the loom on breaking an end and to detect the broken end There are two types of warp stop motion one is the mechanical type and the other is the electrical type In the mechanical type a drop wire as soon as it falls due to end breakage arrests the movement by some negatively moving part which disconnects the loom power thus stopping the loom The electrical warp stop motion operates on the principle of a falling drop wire closing an electrical circuit, in turn acts upon an electromagnet or solenoid to position a bunter in the path of the moving object and subsequently knocks off the loom.

It has already been mentioned that weft feeler motion is a part of the bobbin changing or the shuttle changing mechanism Its function is to feel the presence or absence of the weft in the bobbin fixed in the shuttle in action and direct the replenishing mechanism to act when it feels the absence of the weft in the bobbin, by mechanical or electrical device The mechanical weft feeler mechanism may be again of 3 types viz the Side Swip Slip feeler which may slip towards the centre or the base of the pirn, the clipper type which are purely depth feeler and third is the slotted pirn feeler

There are few other automatic operations like reverse weaving pick finding, heald levelling devices etc incorporated in the modern fully automatic continental looms like Ruti and Kovo looms

The United States of America is the birth place of the automatic loom The introduction and the development of which was not to have a greater production than could be had from ordinary looms but on account of the labour condition, that is demand of high pay and scarcity of skilled labour, prevailing in that country The automatic loom was therefore introduced in the USA to get more production per man hour by giving more looms per operative thus compensating for high wages and the working of the loom being automatic and highly skilled labour was not necessary

The automatic weaving is also a method of production affecting organisation of labour It is not possible for a weaver to look after more looms if there are too many warp and weft breakages The breakages of warp and weft yarn should therefore be brought to the minimum by supply of better quality yarn. Again for the efficient working of the automatic looms working conditions should also be improved by planning improved lay out of the looms, better lighting arrangement and automatic control of the atmospheric condition thus making it congenial to the weaver and reducing fatigue of the worker to the minimum.

Three things come in the way of introduction of automatic looms. Firstly the price which is very high when compared to the ordinary looms, secondly the expenses incurred for supplying better yarn which is absolutely essential for these looms and thirdly that the production per loom is not ordinarily higher when compared to that of the ordinary loom But if one takes a long range view all the above points can be off set by the man hour production, better quality of cloth produced thus fetching better price and the longer life and efficient operation of the machine.

Further cloth can be produced at a comparatively cheaper rate in an automatic loom when efficiently operated The automatic weaving system is therefore not only paying to the individual weaver being able to work more looms it is also profitable to the producers as a long range view and the product is also better and cheaper to the consumer All the three parties, the producer, the labour as well as the consumer are therefore benefitted by the introduction of the AUTOMATIC LOOMS.

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After the war, also outside the U S A., gradually more and more factory managers have come to realise that a factory plant, however, up-to-date it may be, even if it has at its disposal the most skilful and industrious workers and unlimited supply of raw materials, can never be sufficiently efficient if its lighting is not properly planned

However even now many producers are under the wrong impression that good lighting is expensive and consider it only all too often as an incidental rather than an essential condition to work. Many factory owners or managers are quite willing to introduce the latest machines or to adopt a new production process, but they still amble along with the old fashion type of lighting, entirely ignoring the fact that for every kind of work a minimum light level is required to ascertain maximum production No body today would expect even a reasonable production in a factory illuminated by candles or gas jets and gradually all such light sources have been replaced by filament lamps However the ever increasing production speed and necessity for greater efficiency have made necessary the use of ever stronger lamps and lighting equipments.

Fortunately modern science have put at our disposal light sources which render it possible to obtain the higher illumination levels required in modern industries

After the invention of the glow lamp in 1879 by Edison, which meant at the time an enormous, improvement in the lighting field, the American Coolidge found a new method of processing tungsten which made it practically possible to draw straight filaments Thereafter the gasfilled lamp was invented which meant a higher luminous output and then again the American scientist Langmuir arrived at the interesting conclusion that heat losses are practically the same for thick and thin wires glowing in a gas He found that when a thin wire is coiled in such a way that it becomes several times thicker than the wire itself the same behaves like a thick wire Thanks to the fact that in this way the length of the wire could be reduced upto about 1/5th of its original length, heat losses too were reduced proportionately This invention led to the construction of the gas-filled coiled filament lamps

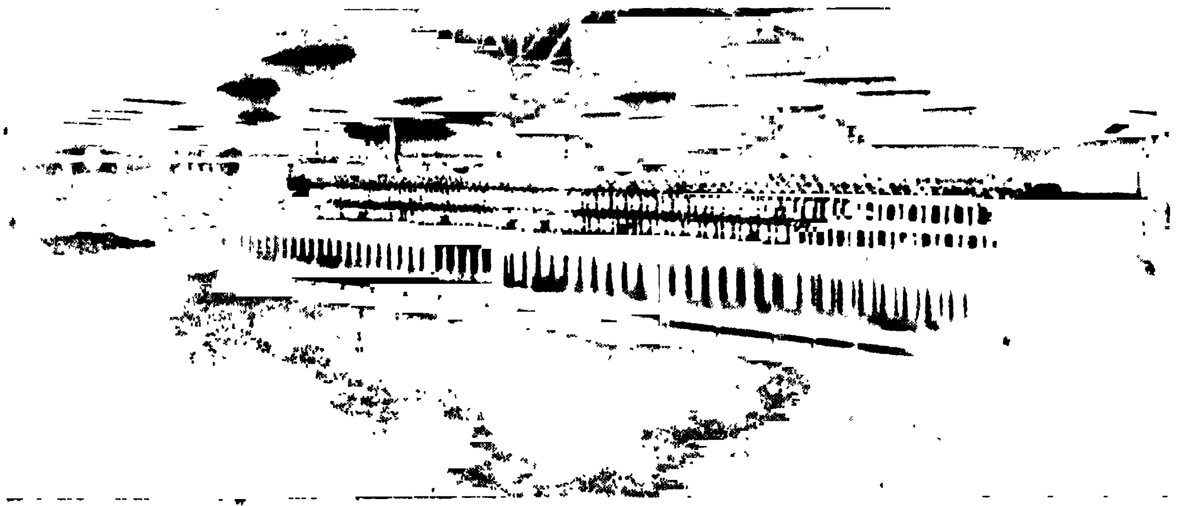
After much further experimenting the so-called coiled coil gasfilled lamp was invented. Owing to this invention the coiled filament could be coiled a second time with a resultant further reduction of the filament length and consequently of the heat losses as well Thanks to this shorter filament and the considerably smaller number of filament supports, coiled coil filament lamps emit an extremely higher luminous output.

Efficiency :

In this connection it is to be noted that the standard way of considering the efficiency of a lamp nowadays is to state the luminous output per watt of energy input. It is the only satisfactory way of comparing efficiencies and is obtained by dividing the total lumens of the lamp by the watts consumed The older method of rating efficiency in terms of watts per candle has now been succeeded by the "lumen per watt" system.

The quantity of light emitted by an A 1 quality coiled coil filament lamp amounts to 15-16 lumens per watt for a 300 or 500 watt lamp on 230 volt

However the electric incandescent lamp which only 20 years ago predominated in the field of lighting is now facing keen competition on the part of fluorescent, Mercury and Sodium Discharge lamps



The illumination of fluorescent tubes in the Surat Textiles Ltd.

The specific luminous flux of a glow lamp lies between 9 and 20 lumens/watt which corresponds with a luminous efficiency of about 2.5%. When we know that a simple glow worm is capable of producing light, different from a temperature Radiator, but upto an efficiency of 99%, it is clear that the quantity of light produced by normal tungsten filament lamps actually is only a meagre result.

Small wonder that modern science has been looking for ways and means to improve the efficiency of lamp lighting and a solution was ultimately found in the field of electro-and photo luminescence.

The fact that modern Sodium Discharge lamps produce nowadays about 40/65 lumens/watts and Mercury Discharge lamps about 35/40 lumens/watts shows an enormous improvement compared with the light output of normal filament lamps.

The invention and application of gas discharge lamps means a turning point in the history of illumination engineering of much greater importance than the transition from oil lamps to gasfilled incandescent lamps. Gas discharge lighting can be considered as the lighting for the near future

Efficiency of fluorescent lighting.

Owing to these highly efficient light-sources it is possible now-a-days to reach the high illumination levels required for modern production at comparatively low cost

Let us assume for argument's sake that in an Assembly Hall 50 light points are used fitted with 300 watt lamps The current consumption would amount to 15 KW/hour for a total quantity of light of approximately 50 x 4650 lumens —232500 lumens In order to obtain the same quantity of light it would be sufficient to install 55 twin industrial fittings fitted with two fluorescent lamps of 40 watt for a total current consumption of 3.4 KW/hour Respectively for the same current consumption of 15 KW/hour 150 of such fluorescent lighting fittings could be installed, producing 630000 lumens or 2/3 times more light for the same current consumption.

Apart from many other advantages these fluorescent lamps have the great advantage of radiating hardly any heat at all, as the lamps become only handwarm and moreover, produce a pleasant diffused light which avoids annoying shadows

Long Life

In addition to the high light output and current saving factors of these Mercury and Sodium Discharge Lamps, they have a very long and efficient life It is true that these lamps are rather more expensive due to the electrical gear required for their operation but this disadvantage is easily counter-balanced by their many outstanding advantages It goes without saying that in order to reach the longest possible life and the greatest light output, it is of vital importance to go in for first class electrical accessories which, although slightly higher in price, will certainly pay for themselves, thanks to a longer lamp life and a lower current consumption.

Planned Lighting:

Due to the great strides made in the development of these new light-sources a new profession has come into existance namely that of a lighting engineer Now-a-days any firm of repute, manufacturing lamps and lighting fixtures maintain a staff especially trained in the lighting field, in order to give technical advice to prospective buyers as to the best type of lighting equipment required for a particular job, where and how it is to be installed and the number of fittings required so as to obtain the recommended lighting level for that particular job.

The illumination of fluorescent tubes in the Surat Textiles Ltd.

One of the major lighting errors frequently found in factories is "patch work lighting", namely lighting of a widely varying brightness in the same workshop. Workbenches and machines for example, are located in pools of brilliant illumination whereas all around everything appears by contrast to be almost in darkness Due to this kind of lighting, eyes of the workers have to adjust themselves frequently which is tiring, delays action and leads to mistakes and accidents The job of seeing quite accurately uses up physical energy all the time and the poorer the light the more energy is required That is why workers *cannot* for any length of time do either so much work or such *efficient* work with the type of lighting frequently found in factories as they could if the lighting were properly planned This applies to all classes of workers but especially to those past first youth whose eye-sight is naturally deteriorated. To retain the full value of these your more experienced workers—it is therefore, particularly important to have "planned lighting" which will give the required lighting there where it is required and at the same time will avoid unpleasant contrasts

Similar to a unit of length (meter or foot) or a unit of weight (pound or gram) we have a unit of "illumination" or "lighting intensity", which is expressed in foot candles abbreviated f c The f c is the quantity of light produced by one standard candle power at a distance of one foot or one f.c. = 1 lumen, distributed equally over 1 sq ft of area

The human eye has an enormous adaptability to the different lavels of light encountered in daily life Full sunlight for instance gives an illumination of about 10,000 f c A sparely illuminated room has perhaps not more light than 1/2 or 1 f c

Extensive study has been made in various countries about the minimum light level required for a specific kind of work It is clear that the illumination on the work-bench of an engraver should be of a much higher level than for instance in a carpenter shop where packing crates are made The following table refers to the various grades of illumination recommended for different kind of work in industries

High precision:	Watchmaking, small instruments, engraving	200 - 100 f.c
Precision :	precision assembly, adjusting revolving lathes, precision turning, precision pressing, burnishing	100 - 50 f c.
Common :	boring, turning, assembly, fine sewing machine work in a clothing factory	50 - 25 f.c.
Gross :	blacksmith, rolling, spinning machines in textile industry	12 - 8 f.c

Let us now consider the advantages of good lighting Government investigation in Great Britian and factory experience in Great Britain and the U.S.A. have proved without any doubt the increase in production due to better lighting

Type of work	Illumination original f c	Illumination present f c	Increase in production
Weaving (worsted)	13 3	29	5 3%
Jute spinning	2	10	17%

But increase of production was not the only outcome of better illumination There was also a marked decrease of accidents and less accidents, of course, means less loss in man-hours As a result of insufficient lighting it was found in the U.S A. over a period of one year, that accidents during the time of artificial lighting amounted to 4.18% against 3 09% during daylight

There is another aspect to better illumination, what we may call, the human aspect Insufficient lighting causes abnormal strain upon the eyes, the worker soon becomes tired With proper illumination, however, there will be a very favourable effect upon the worker's joy in his work It will stimulate him to greater activity and as he will take more interest in his job the result will be a better quality of the product and less spoilage of materials

As a typical example of the effect of improved lighting on the reduction of spoilage it may be mentioned that, in a weaving industry in Great Britain, the spoilage of materials was 20% less when the illumination was raised from 13.3 f.c. to 29 f.c

Artificial illumination will always be a substitute for daylight Especially when the sky is clouded as to hide the sun, its light is more diffused. With a uniformly clouded sky the light will be uniformly diffused and there will be hardly any shadows at all This is for most types of work the ideal light Thus, artificial light must come as close to diffused daylight as possible Glare from the sources of light should be avoided The diffusion of light and the absence of shadows will largely depend on the way in which the ceiling and the walls are illuminated. Also the colour of ceiling and walls plays an important role in modern lighting The lighter the colour, the larger the amount of light reflected and the more effective the lighting system will be

Which means of lighting do we have nowadays? There are

1 Ordinary incandescent lamps
2 T L. fluorescent lamps
3 Mercury lamps
4 Sodium lamps

The nos 2, 3 and 4 belong to the so-called gas-discharge tubes. Incandescent lamps for general illumination can be used only for levels up to 20 f.c For higher levels these lamps have too high a current consumption and heat-radiation Only fluorescent lamps can be used for levels exceeding 20 f c Mercury and sodium lamps will not be discussed here as they are mostly used out of doors for street lighting, marshalling yards, docks etc Mercury lamps produce a blue coloured light, sodium lamps give yellow illumination and for these reasons alone these types of lamps are less suitable for factory illumination. Sodium lamps can be used in dusty and smoky spaces because the yellow light penetrates smoke and dust better.

The new fluorescent lamp (or rather tube, because of its shape) is being introduced on a large scale in the industry Because of its high efficiency, low brightness per sq inch of surface and absence of glare, the colour of the light and the small amount of heat it develops, the fluorescent lamp is particularly suitable for accurate work as in textile mills, machine shops, tobacco factories radio factories etc. The colour of the light approaches more closely that of day light

With incandescent lamps a distinction can be made between direct, mixed and predominantly indirect lighting The more indirect the lighting the less is the shadow effect produced by these point-light sources With fluorescent lamps this somewhat expensive and circumstantial way of obtaining sufficient diffused light is no longer necessary, since with tubular lamps diffused lighting can be obtained much more easy and economically

The following table has been published by the Electric Lamp Association of India It gives the recommended values of illumination for various kinds of work in textile mills:

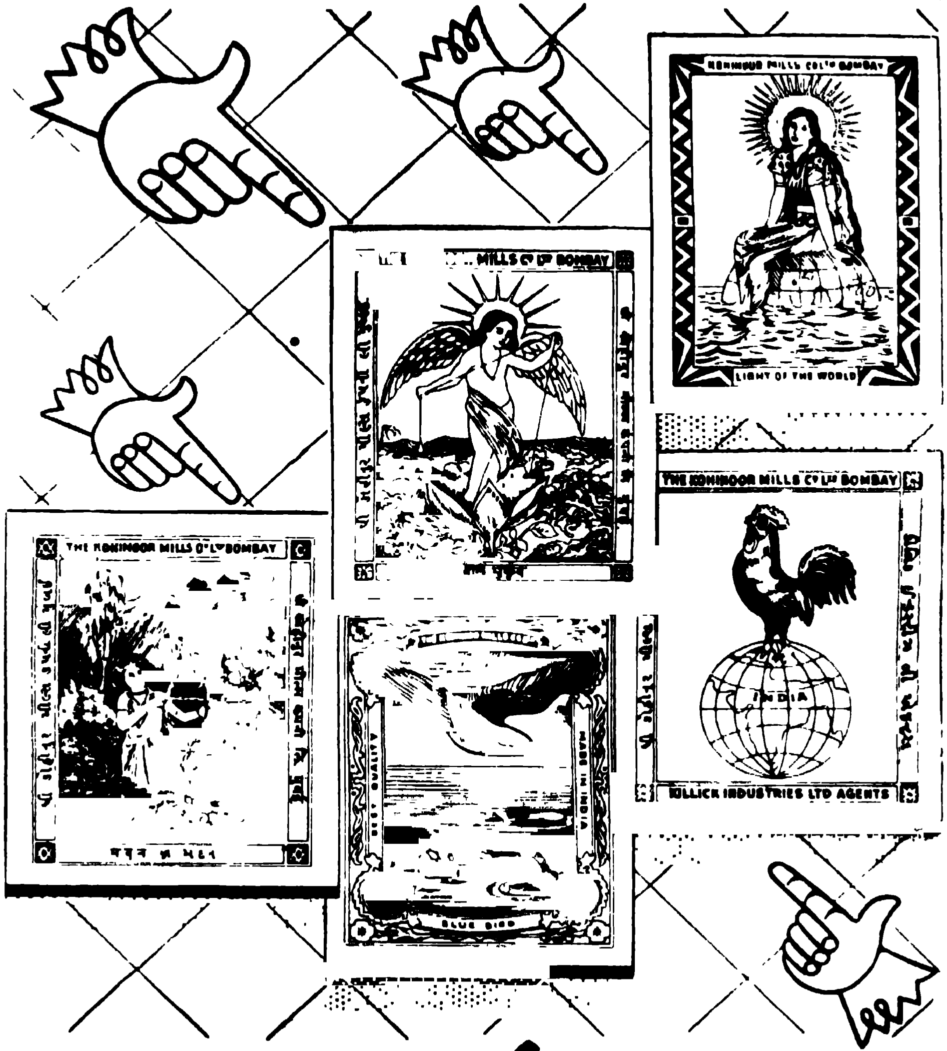
Cotton	f. c.
Bale breaking, Scutching, carding, combing and Roving .	7
Twisting and Winding .	10
Spinning	10
Warping	15
Looms	
Dark colours (Fine Counts) ...	30
Light colours (Fine Counts) ...	20
Grey Cloth	10
Silk	
Winding and Throwing .	15
Quilling, Warping, Weaving and Finishing	20
Woollen	
Scouring, Washing etc	7
Carding and Combing (white), Blending, Drawing and Roving .	7
Spinning, Winding, Sorting, Combing (Coloured), Twisting .	15
Warping	20

Weaving	
Looms	
Fine Worsteds	50
Medium Worsteds and Fine woollen	30
Heavy woollen	10
Burling and Mending	50
Perching	70

The accompanying two photographs show the illumination of Philips fluorescent tubes in the Surat Textiles Ltd and give a good impression about the even distribution of light which has been obtained. How the fluorescent tubes have been mounted can easily be seen. Note the absence of heavy shadows.

Gradually more mills in India begin to recognise the advantage of better lighting. Of course, there are costs involved in modernizing the illumination of a mill but of one thing the owner can be reasonably sure: it will pay in the long run

> *When a man loses his money he has to set out to make more. Sitting still and biting his nails will do him no good.*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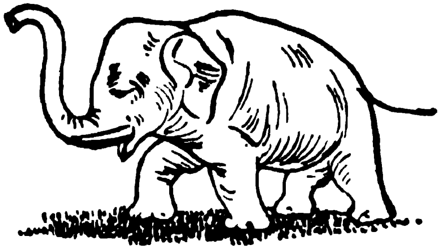

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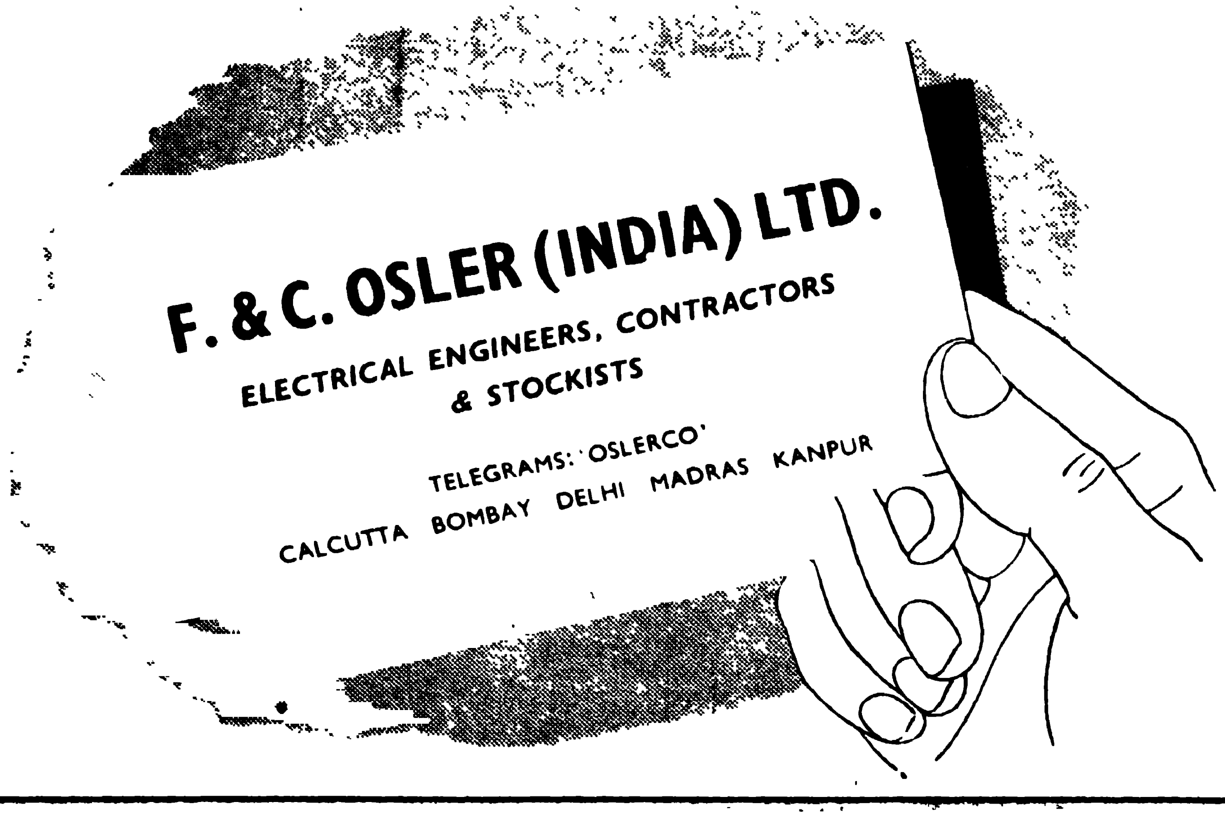

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POWER TRANSMISSION HAIR BELTINGS MANUFACTURED IN INDIA

I. B. SENGUPTA

(*Specially Contributed*)

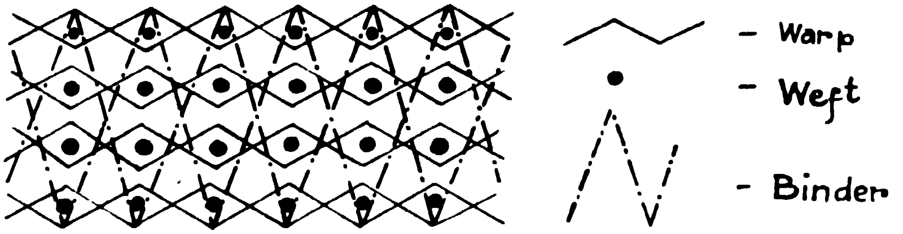
IN India, the manufacture of Textile Beltings for power transmission, is confined to the state of West Bengal only The first factory of its kind was founded in 1882 at Rishra near Serampore, Dt Hooghly by Messrs Birkmyre Bros for long a leading European Jute House of Calcutta They specialized in the manufacture of Hair Beltings and are mostly on production of Hair Beltings with a very small percentage of Cotton Belting also Its well known products, Hastings Hair and Hastings Cotton are all solid woven beltings and since the very inception of the factory, have been defying competition from similar beltings of either foreign or indegenous make Subsequently, during the early part of the present century, some local gentry of education and standing, ventured to start a thoroughly Indian Belting factory which after a few years of precarious existence, was finally taken over. expanded and renamed as Bengal Belting on or about the year 1926 Ever since then, it is the largest Indian textile belting house with a self-sufficient spinning section of its own, catering to the needs of the industries requiring solid woven beltings for power transmission Besides, Birkmyres and Bengal, there are yet another 4 or 5 Belting factories manufacturing solid woven textile beltings They are comparatively of recent origin, all in their teens struggling hard to find their legitimate berth in the economy of the country

It is not the intention of the writer to boost up in this short article, any particular firm against another manufacturing textile beltings but to give a general idea on some of the technical aspects of solid woven textile beltings which have become so popular flat belts for successful power transmission both from the point of view of economy and efficiency

The fundamental principle of weaving solid woven beltings of Cotton or Hair is one and the same, only the components differ in as much as that in the solid woven cotton belting both warp and weft are cotton while in the hair belting, main warp is hair and the weft cotton. Hence it will suffice if the construction of hair belting only, is described, as in cotton belting, only the hair part is to be substituted by cotton.

Solid woven belting is manufactured on heavy looms of special type weaving the belt composed of several layers/plies, in one process The process of weaving is a little complex. The warp consists of the total number of (1) Hair yarn required for the width, thickness and ply of the belt under manufacture, (2) Binder yarn, usually cotton (for the sake of economy without impairing efficiency) would on weavers beams. In addition to Hair and Binder warp, some manufacturers (Birkmyres do) give a pile face on the pulley side of the belt by adding some extra cotton warp ends, with the pile beam slightly on the slack side so that during the process of weaving, these ends, with lower beam-tension, form into waivy lines which according to many experts, help the belt to get firmer grip or bite on the pulley Hence, apart from hair and Binder ends, cotton pile ends form the third series of warp ends in case of those belts giving a pile face The belting can be woven both twill and plain

The function of the Binder yarn which actually makes the belt composed of several plies into one compact homogenous unit is indeed as important as interesting, and its relative movement along with the up and down movement of the other warp yarn is shown in the following sketch to show the binding effect



A Belting can no doubt be manufactured without Binder beams on the self binding principle but such belting will be more flexible

The shedding motion, the picking motion, the beating up of the weft motion and finally coiling of the woven belt on top of the looms on the rear side, as in the case of the woven cloth in the front roller are more or less on the same principle as to be found in cloth, weaving excepting that in the belting looms each of these operations is heavier and accordingly, the mechinism also controlling these operations is heavier and devised accordingly

Hair yarn is usually 4 or 5 fold, supposed to be spun from Camel Hair and is mostly imported from UK Binder yarn as well as pile yarn if used, are usually twisted into required number of folds, usually from basic 8s to 16s single cotton yarn of very good tensile strength In some imported Hair beltings, selvedge is also of hair yarn but suitably twisted cotton yarn from the basic cotton counts already mentioned, may also be used and are actually used by many without any detriment to quality All the warp yarn being twisted into several folds, no sizing ingredient as in the case of cloth, is at all necessary. Weft is entirely composed of cotton yarn either twisted or plied according to requirement, usually from basic counts of good quality 8s to 16s.

Once the belting is woven, it is subjected to a treatment of vegetable oil or paint or Bitumanous compound in order to give it the required finish for better service. The belt is treated in this manner so that there is perfect impregnation of the solution into all the layers and the appertures in the weave are sealed off so that pliability of the threads is not likely to contract when the tension of the belt is relieved The belt is allowed to dry and after drying it is calendered in order to take out the stretch and then coiled into rolls for marketting.

As for the scope for successful use of belting it is worthwhile remembering that belting whether textile, leather or rubber, is a mere 'via media' for power transmission under certain given conditions and those given conditions influence the life and performance of the belt in use Each belting, textile, leather or rubber has its own sphere of service, therefore in selecting power transmission beltings, all these factors shall have to be taken into consideration; otherwise trouble will arise As this article deals with Hair Belting only, it is fair that intending users should be thoroughly conversant with some of its salient features enumerated below:--

1 Hair Belting is usually stiff and therefore larger pulley diameters are preferable

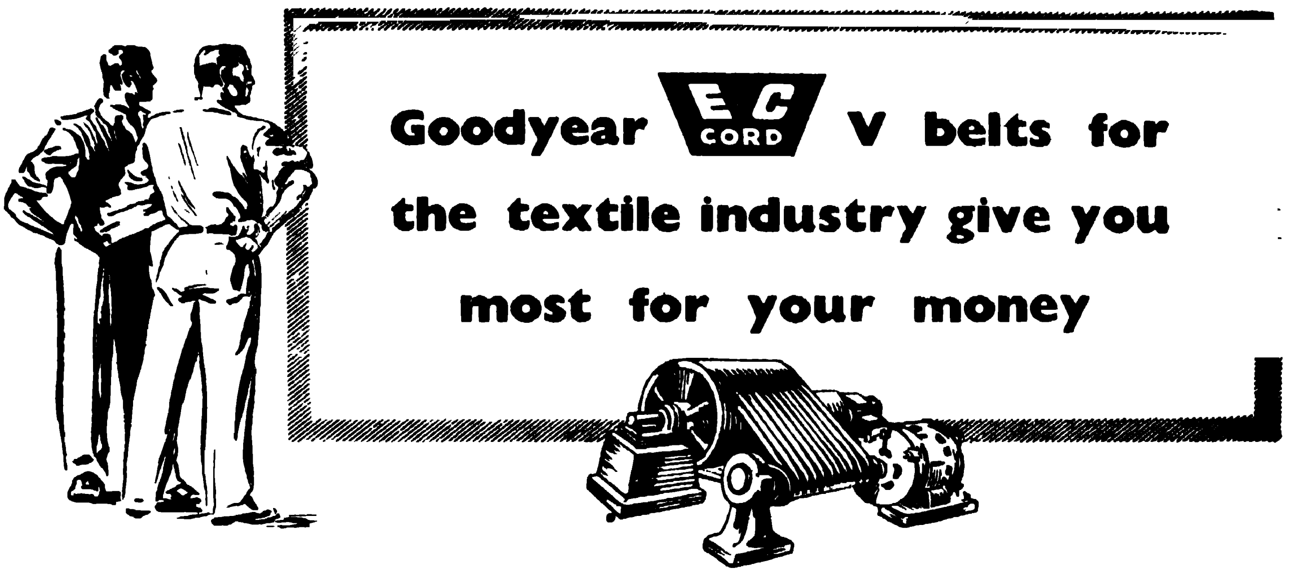
2 Short centre drives are to be avoided.

3 It can stand damp as well as humid atmosphere for temperature over 100 degrees FH it is very good.

4 It is very favourable for high speed drives and shock loads

5. It is favourable for use in Cotton/Jute/Woollen Mills

6. It can withstand oil much better than any other belt though it does not mean that it can successfully withstand upto saturation point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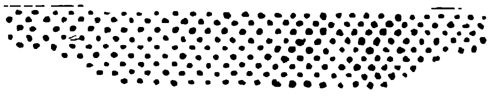

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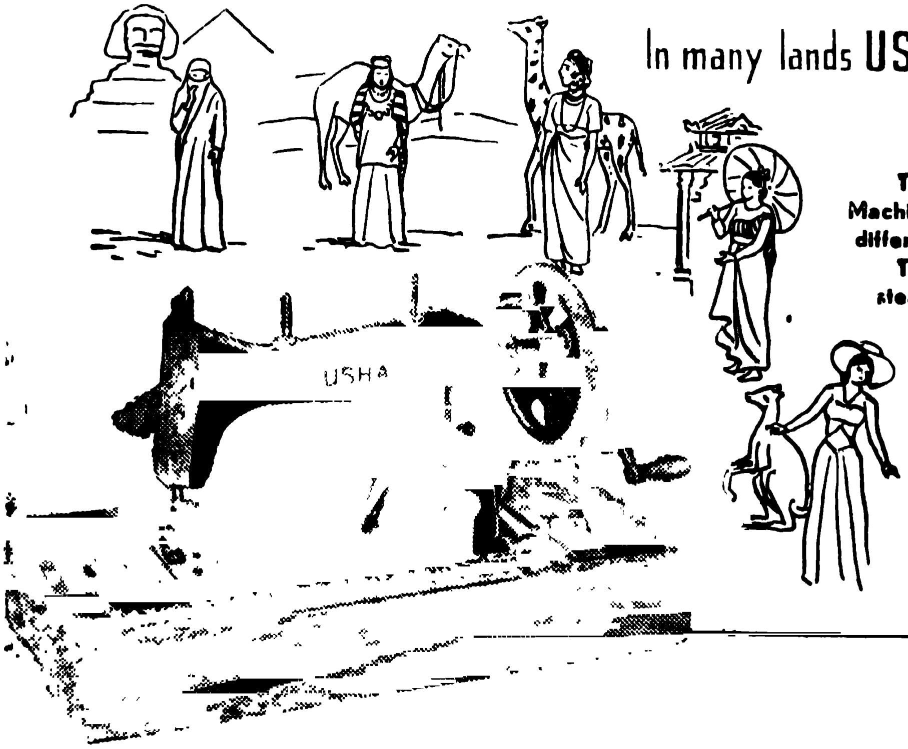

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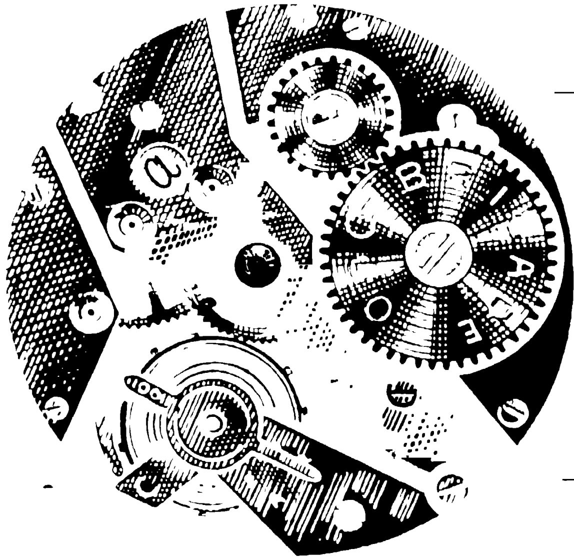

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MANUFACTURE OF SEWING MACHINES

T. R. GUPTA

LIKE many other mechanical inventions, such as typewriters, spinning frames and automobiles, the sewing machine also started from those primitive beginnings and has been developed to its present stage as a result of the efforts of many persons

The first real workable model was devised by a poor tailor who patented it in France in 1830 This device consisted of a crocheted needle which, when descending through the cloth, brought up with it a loop of thread and carried it through the previously made loop, and thus formed a chain on the upper surface of cloth The machine was rather clumsy and was mainly made of wood He made as many as 80 machines which manufactured army clothing in Paris in 1831, when an ignorant and furious mob of tailors, afraid of being thrown out of employment due to this invention, raided his place, wrecked his establishment and nearly killed the unfortunate inventor

This violence, however, did not discourage him He twice obtained patents on metal models with further improvements in 1845 and in 1848 But the troubles of the metal model were so unsurmountable in those days that the inventor lost all hopes He sold his patent rights to Britain The machine was exhibited in 1851 in Britain but attracted no attention He died after a few years unfriended and unrewarded.

Between 1830 to 1850 a number of people were busy simultaneously in Austria France, England and America on inventing workable models of sewing machines, ignorant of the labours and achievements of others in the field Elias Howe, the poor son of a miller, after much trouble, built and patented the first sewing machine for double thread lock stitching type in America in 1846. The double lock stitching was a very ingenious idea and is popular to this day It proved at first a heart-breaking failure to Howe His patent rights were infringed and others started making money out of his idea while he and his family were starving. But Howe had courage as well as genius. He took legal action against the infringers and, after lot of litigation, his patent rights were established. All sewing machine makers had to pay royalties to Howe, and it is said he had collected not less than $2m from such royalties till his death in 1867

The idea of double thread lock stitching, which was developed by Howe, was further perfected and many other improvements like feed and speed were brought about

Many Varieties

Sewing machines are now being made in hundreds of varieties for special kinds of work. Some, for example, are suitable for zig-zag stitching, to make elegant little dresses for children with lace and plaits, and others yet to sew button holes and buttons Special machines are in use for sewing carpets, stitching shoes and boots, quilting and plaiting of blankets. The housewife has been provided with many accessories to enable her to do embroidery work and stitching many other beautiful designs.

During the last 100 years, sewing machine manufacture has developed into a fine art and represents a considerable achievement even in industrially advanced countries, but in India, which has little background of production engineering, the task was immeasurably more difficult With such a specialized product, very little is known of the technique outside the industry; yet in the country a resolute person like the late Mr. B. D. Basil started his experiments nearly 15 years ago in a small garage, which developed into a small factory in a house, making a few machines every month. Who except the keen industrialist could imagine the tremendous future in front of this industry? The industry had to face a very rough time in the initial stages, and almost the whole capital at one time was lost on experimentation.

During the war period, the industry could not make much advance because of the difficulties of getting proper equipment It was only in 1944 that with the assistance of the then Directorate-General of Industries and Supplies, orders were placed on U.K, and U S, firms for modern tools and equipment The services of Mr Jos D Scaife, in the capacity of an adviser, were made available to the industry and he helped it to iron out all difficulties

The models under production were developed after close and careful study of the designs and workings of different known models in the market The engineers studied the relative motions of different makes of machines, and keeping the Indian conditions in view they adopted the best features of each model Full consideration was given to improving the appearance and to facilitate working in the course of manufacture. Difficulties of the users have all along been kept in view to make them trouble-free Detailed process sheets were laid out giving full directions about each operation, stating tools, gauges and equipment required to complete the component throughout all the stages of operation.

Designs Completed

On the basis of these process sheets designs for necessary jigs, fixtures, tools and gauges, including special purpose machines, were completed. All equipment was made in the works' tool room. Highly complicated special purpose machines were made at the works, some of which are capable or drilling 13 holes simultaneously from three different directions. Each operation was simplified to the last point and work carried out on mass production basis. All components are being finished to very close precision limits with selected raw materials under controlled conditions for durability and smooth working.

Equal consideration has been given to the manufacture of furniture for sewing machines. Ornamental laminated table boards, bases, covers and cabinets are manufactured in tasteful designs

Compared to manufactures of sewing machines in Germany Switzerland, Italy and Japan, the difficulties of the Indian sewing machine manufacturer were manifold. The largest units manufacturing sewing machines obtain 40 to 5% of finished components, forgings, castings or ornamental plywood sheets from outside firms, while the Indian industry had to develop everything of their own which multiplied their difficulties. Except the sewing machine needle, everything is made in the country and all parts which require replacement are made to international standards and are interchangeable with imported sewing machines in this class

Rigid Control

Extreme care is taken by the industry in maintaining rigid inspection control in the course of manufacture and it costs the industry nearly 6% of the total labour cost.

The sewing machine industry at present has reached a production level of about 5,000 machines per month out of which the largest single unit produces nearly 4,500 machines per month with an ultimate installed capacity to produce 10 000 sewing machines per month At present ony domestic and tailor model machines are in production. The industrial model has been successfully experimented and is being brought into production.

In the world nearly half a million sewing machines are being produced monthly. Nearly 50% of the total production is in the same classes in which the Indian sewing machine industry is producing today

Except for special steels which only come to about 3% of the total production cost, indigenous materials are being utilized in the construction of machines.

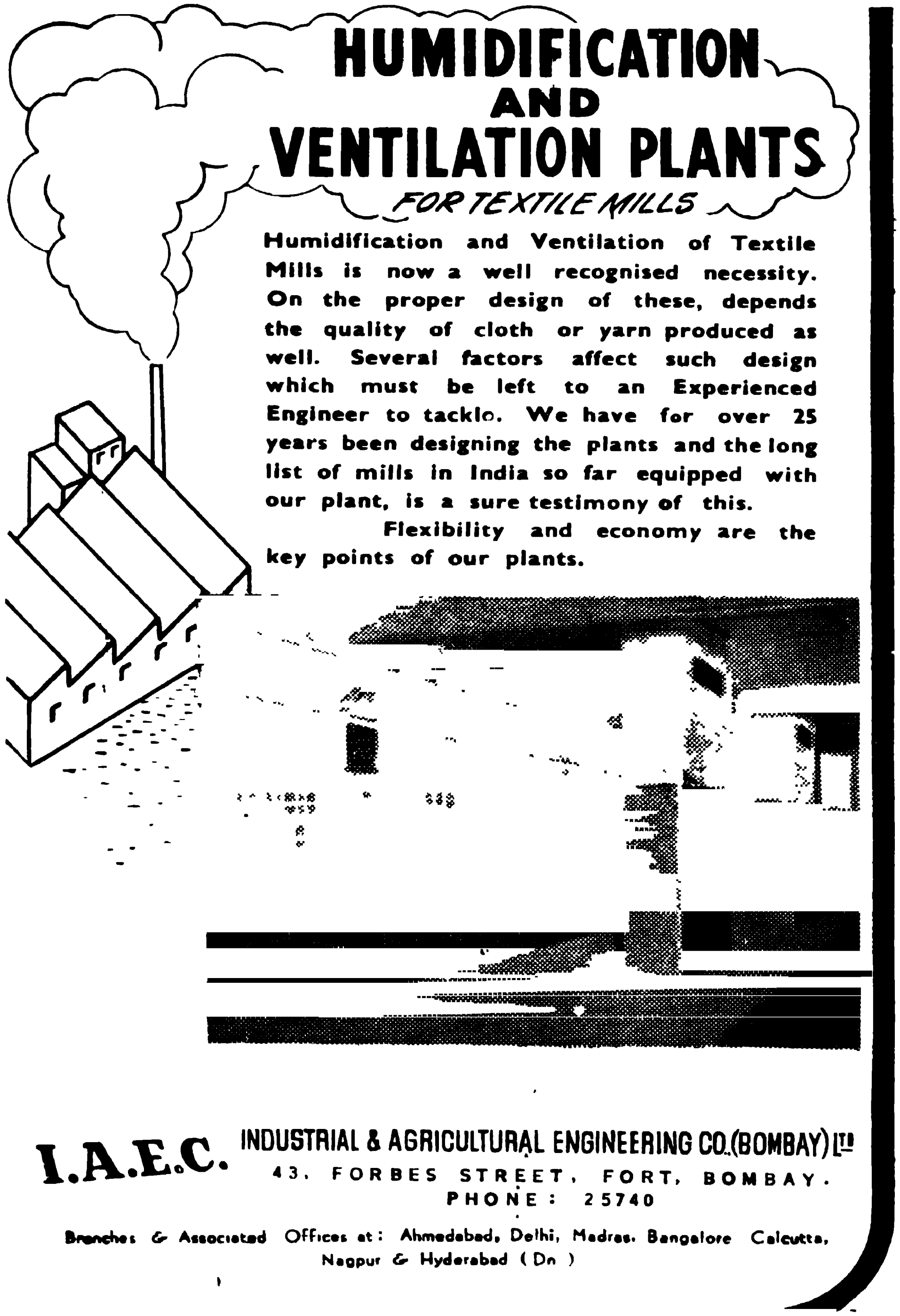
In the tailor model and domestic sewing machines nearly 80% of the total demand of the country is being met by the industry The industry has also started exporting its produce to many foreign countries including Australia, New Zealand, South America and Germany. The industry has a very good chance of competing with the sewing machine manufacturers of the world because of the low cost of raw material and labour in India. Regular exports of Indian sewing machines to foreign countries to the extent of 1,000 per month indicate their good quality and competitive prices, and it is hoped that in future the Indian sewing machine industry will find wide popularity in world markets Inside the country, old prejjudices against indigenous products have gone down considerably because of the efforts of manufacturers to produce better quality sewing machines.

Sales of sewing machines involve great complexities. The industry has found it necessary to esablish a net work of service stations with all the selling organizations in the country to provide service and to establish tailor and embroidery schools Similar procedure is being adopted in foreign countries through selected agents.

At present the sewing machine industry is in an enviable position, and is inspiring many other light engineering industries to organize on similar lines It is a matter of pride to the sewing machine industry that it has flourished so well in such a short span of time that, sewing machines are being sold almost at half the price of the imported machines The industry is also exporting to other countries and earning valuable foreign exchange.

Remember that when you make an appointment with another person you assume the responsibility of punctuality, and that you have not the right to be a single minute late.

The best compensation for doing things is the ability to do more.



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AIR CONDITIONING IN COTTON TEXTILE MILLS

K. S. S. IYENGAR, B. E., (Mech.)

THE primitive idea that air-conditioning in an Industry is a luxury and an uncalled for item of expenditure is fast dying out and it is now being increasingly recognized that it is not only a vital necessity but a profitable investment. The Cotton Textile Industry is one of the first to recognise this Other industries to do so are the Tobacco, Paper, Precision Instruments and Tea Industries Improved air conditions inside a factory definitely sustain the energy and efficiency of the operatives thus tending towards increased output of work Apart from that, the maintenance of requisite humidities in the various processes of a textile mill, so vital for the manufacture of good yarn and cloth and without which both quality and quantity of production are visibly affected adversely, is one of the principal functions of such air conditioning plants The proper functions of an air conditioning plant are to maintain the correct temperature, humidity and air motion in the space served by it, clean the air in circulation of dust and offensive vapours with which it usually gets charged by reason of the processes employed in the industry The relative humidities usually required to be maintained in a Cotton Mill are: Carding 50-55%, Combing 50-60%, Roving 50-60%, Ring Spinning 50-65%, Winding and Warping 65-75%; Weaving 70-85%

In many parts of India the climate is dry with extremes of temperature and therefore it is obvious that much stands to be gained by a plant working on the principle of evaporative cooling of air in a properly proportioned air washing and humidifying chamber It is still considered too expensive to put in Air-conditioning plants embodying a refrigeration plant The usual and fairly effective method of air-conditioning employed in the Textile Industry is to instal a combined direct water atomisation humidification plant and a ventilating plant working on the principle of evaporative cooling. Thus air cooling (or heating in winter) and humidification are considered the two most principal functions of air conditioning plants is Cotton Mills in India. Again, of the two, the humidification is generally the more important as without it the principal processes such as weaving etc., could not be carried on.

The most common method of humidification is to introduce water in liquid state into the space to be humidified and to have this water atomised through special nozzles therein, which convert it into vapour easily absorbed by the surrounding air and thus raise the internal dew point or in other words, the moisture content of the air in that space. This atomisation is effected generally by compressed air and in one type of plant, the pressure of air employed is as low as 60 lbs per sq inch. A rotary air compressor is employed to supply such air which is conveyed to the atomiser nozzles placed at selected places in the department through a net work of small sized pipes The number of such nozzles in any particular department is dependent upon the quantity of water required to be atomised to maintain the required relative humidity in it. Immediately below the compressed air pipes are run the water pipes supplying water for atomisation to the nozzles. This net work of water pipes is connected to special Regulating Tanks from which water is drawn into the system by injecting into them compressed air at a pressure just necessary for the purpose The water supply to these tanks is from an outside source The quantity of water so atomised and hence the degree of humidity is thus rendered capable of close regulation by adjustment of the air pressure injected into each tank, which adjustment is effected by specially designed Regulating Valves installed near each tank. This system of artifical humidification is very simple and possesses many other advantages by reason of design such as, comparatively lower power consumption by reason of the low pressure of compressed air employed, close regulation of humidities to suit seasonal variations, automatic cleaning of the atomiser nozzles by reason of the water nozzle being placed outside the air nozzle and thus being permanently hit by the air jet and any impurities being blown away by it There are also several other important features incorporated in the plant which make it a compact and dependable unit

Coming to the Air Cooling (or heating) unit. which is the other component of a cotton mill air conditioning plant, this system involves the introduction of water in vapour form into the space served by it For this, air is employed as the carrying medium Centrifugal or axial flow fans force or draw a current of fresh air from outside into a specially constructed air washing chamber in which are fixed spray pipes with nozzles which are fed with water under pressure by a circulating pump The air comes into intimate contact with the fine water spray and in consequence gets cooled and saturated at the temperature of the spray water, which, because it is recirculated by the pump, will be the same as the wet bulb temperature of the air forced or drawn through This air then passes over a number of galvanised iron baffle plates so dispersed as to intercept any unabsorbed free water particles. The air thus cooled and saturated at the wet bulb temperature of outside air and freed from suspended water particles is conveyed into a system of ducts laid out in the department These ducts are constructed either of masonry when laid underground or of sheet metal when laid overhead. These ducts have, provided in them, openings at intervals so designed as to evenly spread the conditioned air into the department and thus create a uniform temperature in it To make the plant adaptable for winter operation, it is usual to draw about 75% of the department air for re-circulation through the spray chamber, the other 25% being fresh air from outside Also preheating the air drawn through by properly proportioned steam operated heating batteries or heating the circulating water suitably by steam coils or steam jets would enable the plant to work satisfactorily during winter months when the temperature of the outside air is too low for the operation of the plant otherwise Any one of the above methods or a proper combination of any of them, would make the plant ideally suited for winter operation

The combined system of compressed air humidification and ventilating plant, particularly in situations where high humidities are required to be maintained is found to be the most economical as by this, the quantity of air in circulation can be kept within reasonable limits and the plant becomes more flexible There is also a saving in initial cost and also in running costs through power economy

Not the least important about such plants is the proper designing which affects vitally the performance and hence the final results Although calculations are not formidable such designing requires utmost care and it is strongly recommended that prospective buyers, right from the start consult experts to ensure that the plant is designed in the most suitable way and not to enforce upon the designers a number of conditions which may lead to an unsuitable, inefficient and expensive plant being supplied It must be remembered that temperature and humidity are co-related and the design of the humidification and the ventilating plant must naturally take this into account and each has to be designed to supplement the other in order to produce the final desired results The principal problem in such designing is the correct estimation of the amount of saturated air to be used for cooling the air in the department and of the amount of water to be atomised for obtaining the required humidity. The former obviously depends upon the total amount of heat in BTU per minute generated within by machinery, lamps and operatives and transmitted from without through conduction from walls, floors, doors, windows, ceilings and from roof. The correct computation of this calls for a thorough knowledge of the thermal conductivities of the various building materials and also of the latitude and weather data of the place If a combined atomiser and ventilating plant is working, then it is necessary to deduct from the total heat so computed, the heat absorbed as latent heat by the atomisation of water in the department and the difference would represent the total heat in BTU per minute which has to be absorbed by the ventilating air Calling this nett total heat as H BTU per minute, the amount of saturated air required to absorb it can be worked out from the following expression·

$$Q = \frac{H \times 139}{24(T\text{-}d)}$$

Where H Total heat in BTU per minute

T— Desired inside Dry bulb temperature F

d - Dew point temperature of entering air F

Q— Quantity of saturated air required in cubic feet per minute

The estimation of quantity of water to be atomised is not also a difficult matter For this, it must be remembered that air at a definite dew point temperature has a definite quantity of moisture per cubic foot of air in it Thus it becomes necessary to determine the dew point temperature of the air entering the department, the quantity of such air in circulation per minute and the final desired dew point temperature in the department to ensure the required humidity. Having determined the first and the last, psychrometric charts give the quantity of moisture to be added per cubic feet of air to step up the dew point to that extent. This quantity multiplied by the quantity of air in circulation per minute gives the quantity of moisture required to be atomised every minute.

Air filtration is also one of the principal functions of an air conditioning plant, as dust in air is not only a menance for health, but can cause considerable damage to machinery through excessive wear and tear There are several types of filters to separate this dust from air, some of the renewable type, built in standard units each of a capacity of 1000 cubic feet of air per minute for a velocity through the filtering media of 36' per minute Such units can be grouped within a metal framework for higher capacities. There are also self cleaning automatic filters specially developed for use in Textile mills Cotton lint and similar fibrous materials have always presented a difficult problem to tackle with filters and after careful experimenting with several types of media it has recently been found that a special composition paper is the best for the purpose and this is now universally used for all filters designed for collection of such fibrous dust These self cleaning types of filters can operate with an air velocity of 500' per minute through the media This type of filter is made in vertical sections of one width and in heights from 5' to 15' The filtering paper from the roll at the top of the casing is transported on a continuous screen down the face of the filter and re-rolled automatically at the bottom. The dust collected during the period the paper is exposed in the air stream is rolled up with it and when the roll by reason of the dust collected on it has attained such size that it cannot operate any more, it must be removed from the filter. The screen motion is through a small fractional horse power motor, which makes the filter fully automatic and self cleaning.

An occasional misfortune is a good thing. It reminds us that no one has absolute independence.

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WOOLLEN TEXTILES IN INDIA

KANAILAL BASU

USE of woollen textiles is as old as cotton textiles It is more durable than cotton too, and capable of retaining more body-heat. The main animal furs from which wool is produced,—are sheep, goat, Alpaka, Lama, and camel.

The wool collecting areas in India are Rajputana, Uttar Pradesh, Madras, East Punjab, Kashmir, and Madhya Pradesh Jodhpur alone supplies nearly 12% of the entire Indian production of wool Apart from these areas Bikanir, Joypur, Ajmer are also important for quality wool—specially Bikanir Nainital, Almora, Gharwal, Mirzapur etc,—places of Uttar Pradesh are famous for woollen industry In Southern India the important places are Mysore, Coimbatore, Bereilly, Cornwall, and Khandesh Wardha, Jubbalpore, Nagpur, and Raypur of Madhya Pradesh are areas of wool collection South Indian black wool and white wool of Kathiwar are widely known in business circles. India has suffered much in her woollen industry due to the fact, that some important areas as regards the industry, like parts of Punjab, North Western Frontier, Sind, Beluchistan, are now in Pakistan.

The annual average collection of wool in India is nearly 60 million pounds, valuing Rs. 6 crores approximately But availability of fur per unit of animal in India is very low. It's only 2 lbs per unit here, where as it is 8 lbs per unit in Australia.

Truely speaking East and West Punjab are the main areas of wool business and as such have become important woollen industry centres. Nowhere else are found such huge quantities of raw wool at a time except these two areas. Ludhiana, Gurudaspur, Amritsar, Kanpur etc. are important wool manufacturing centres in India. Kashmir is particularly famous for woollen shawl

Among the wool producing countries of the world the place of India is not at all significant The following table will show the respective percentage shares of the different countries in the total wool production of the world

Australia	26.5%
Argentine	12.9
New Zealand	9.4
U S A	7.5
U S S R	6.7
South Africa Union	5.4
Uruguya	4.6
Spain	2.0
U.K.	1.9
Turkey	1.5
Indian Union	1.4
Others	20.2

At present Indian Union produces on an average nearly 60 million lbs of wool annually Out of this volume 86 lakh lbs were exported during 1948-49, which yielded nearly one crore of rupees. U K is the main customer of Indian wool. Next comes U S A. Before partition some 3½ crores of rupees was the average annual collection from Indian wool export. Except raw wool, carpet and blanket are important items of Indian manufactured wool export. The total of other manufactured woollen goods does not generally exceed 50 lakh of rupees on an average. During 1948-49 some 2 crores 61 lakh of rupees were the total value of export of Indian blankets and carpets. In this case also U.K. was our main customer. Out of every 100 rupees worth of woollen blankets or carpets U.K took goods worth of Rs. 67, then Canada, then South Africa.

The following table will show the value of Indian export of raw and manufactured wool.

	Raw Wool (000 Rs.)	Manufactured Wool (000 Rs.)
1849-50	7,34	22,05
59-60	65,50	33,77
69-70	70,89	38,31
79-80	1,18,78	16,22
89-90	1,77,91	17,61
1899-1900	1,35,64	25,33
09-10	2,85,77	24,06
15-16	3,79,09	24,97
18-19	5,39,25	17,55
19-20	4,01,27	67,38
1924-25	5,07,30	1,14,29
29-30	4,42,22	91,33
38-39	2,98,68	86,26
43-44	1,71,82	63,16
44-45	2,27,65	1,63,03
46-47	3,94,71	5,23,50
48-49	1,08,83	3,04,07
50-51	8,84,28	6,08,97
51-52	5,62,39	6,49,57

Apart from export, India imports significant quantities of raw and manufactured wool. During 1948-49 the volume of foreign import in India was 1 crore 45 lakh of lbs, valued at near about 3 crore of rupees. Pakistan's share in the value was 1 crore 27 lakh of rupees. The following table will show the value of foreign import of raw and manufactured wool in India.

	Raw Wool (000 Rs.)	Manufactured Wool (000 Rs.)
1864-65		1,30,17
69-70	8,10	89,50
79-80	8,73	87,80
89-90	13,67	1,43,51
1899-1900	8,55	1,75,80
09-10	10,83	2,08,11
18-19	7,48	1,59,85
27-28	44,95	4,91,87
29-30	51,71	3,76,75
32-33	42,12	2,54,35
35-36	44,10	2,34,44
38-39	62,11	2,19,78
43-44	4,02,25	44,73
44-45	2,09,57	1,05,15
46-47	2,04,11	5,63,16
48-49	3,17,01	7,17,76
50-51	5,61,83	1,64,66
51-52	2,58,38	8,23,06

Among the items of imported woollen manufactures in India, cloth occupies the topmost position with 43.0% of the total. Threads come next with 21.2%, Blankets third with 13.6%, Stokings next with 2.5%, Flanel 1.5%, Carpet 1.6%.

As regards production of woollen textiles in India, it can be said that some 21,000,000 lbs were produced during 1949, 18,053,000 lbs in 1950, and 17,695,000 lbs in 1951. During January to May 1952, 5,615,000 lbs were the total production.

In India there are some 30 mills engaged in the production of woollen textiles. Number of labourers engaged in the industry is nearly 8000. Some 30% of these labourers are in Uttar Pradesh, the second place is taken by Bombay.

Besides the actual and direct use of wool, there are some other secondary uses of the same, which may be said to be the by-products of wool. The first of such is called "Yalk". It's a kind of wool grease obtained from newly collected raw wool. It is used to prevent friction in "ball bearing" arrangements. The water which remains after taking out the grease contains patash salt, which can be used as a good manure. A third use of refined wool grease, is medicated ointment. There is another use of wool—wool of inferior quality—that is 'felt'.

Woollen hosiery is an important branch of woollen textile industry. Though it is one of the older industries in India, the first factory manufacturing woollen hosiery goods, was established at Ludhiana in 1884. But extensive manufacture was not possible until the first world war.

From 1928 the industry grew rapidly, due to the fillip given by the Swadeshi movement, and owing to the availability of cheap Merino yarn from Japan. The second world war affected the woollen hosiery industry of India in two ways—firstly due to the high price and shortage of foreign yarn civilian demand for hosiery articles fell, and secondly the fall in demand was compensated by military orders

According to the Tariff Board report on woollen textile Industry (1935), units engaged in production in different provinces were as follows:—

	Power	Non-Power
Punjab	42	132
U P	6	33
N W F P.	2	3
Delhi	7	3
C P	x	1
Bengal	10	90
Bombay	6	x
Kashmir	x	2

Ludhiana in Punjab is the main centre in whole of India as regards woollen hosiery manufactures Number of units (excluding mills) in Ludhiana was 843 in 1935, Amritsar 30, Jullunder 8 During the same year number of units in U P was 10, W Bengal 15, Delhi 2, Bombay 5 Besides, there are four woollen hosiery mills in India, two at Bombay, one at Kanpur, and one at Dhariwal The total amount of capital invested in this branch of woollen textile industry is nearly 3 crores of rupees, out of which Ludhiana alone claims 2.5 crores Ludhiana hosiery industry is predominently on a cottage industry basis. The following table will reveal some interesting facts to this end.

No. of workers employed	No. of units
100 or more	3
50-99	11
20-49	42
5-19	715
Less than 5	34
Total	805.

The industry here is a seasonal one, the season being July to December During season period this particular centre employs about 20,000 labourers 27.03 lakh lbs, 17.60 lakh lbs and 17 47 lakh lbs of woollen yarns were consumed by the Ludhiana factories during the 1949, 1950 and 1951 respectively The production of woollen hosiery at Ludhiana in terms of value were as follows:—

(Lakh of Rs)
(app)

1941	110
42	200
43	157
44	156
45	210
46	182
47	54
48	123
49	156
1950	205

In this connection woollen hosiery productions by mills in India during the 3 years of 1949 '50, and '51 were 13 45, 11.55 and 4 39 lakh lbs respectively The total production of woollen hosiery in India during the 3 years of 1949-51, after converting the figures for the hosiery industry into weight of the finished products is given below —

(In Lakh lbs)

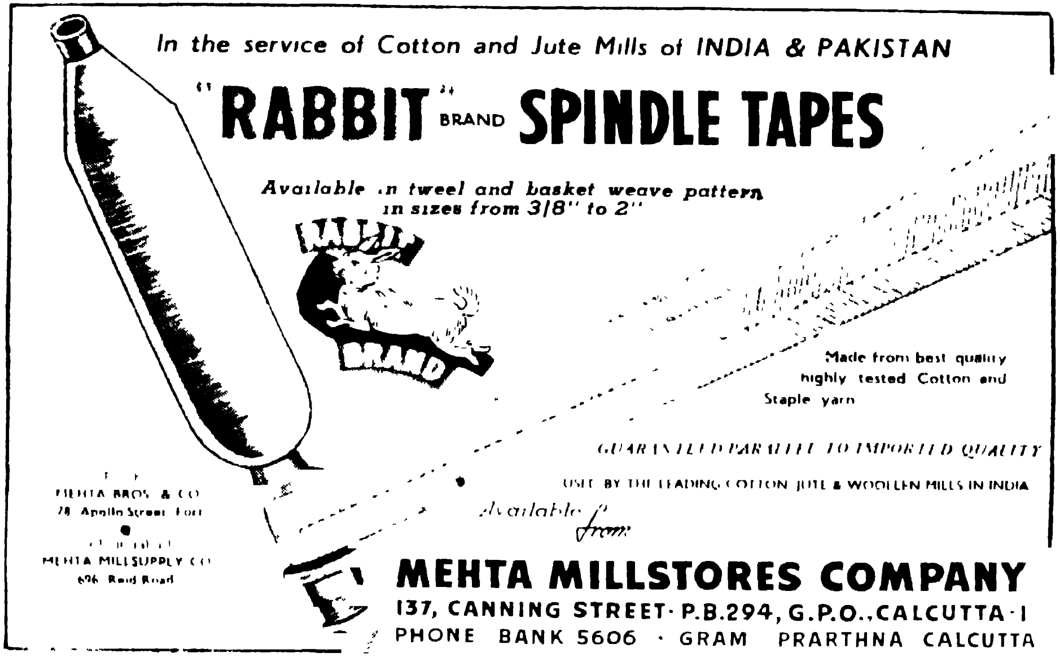
	1949	1950	1951
Units at Ludhiana	22 16	14 56	14 39
Units at other centres	2 22	1 46	1 44
Woollen mills	13 45	11 55	4 39

The maximum quantity of woollen hosiery imported in India in any year during the last decade was 1 83 lakh lbs in 1946-47 Imports during 1949-50 and 1950-51 were 50 53 and 87 21 thousand lbs respectively The average annual production of woollen hosiery in India during 1949 and 1950 was in the order of 33 lakh lbs, where as imports averaged only, 69,000 lbs during the same period. According to the Tariff Commission, India's average annual internal demand for woollen hosiery goods is near about 40 lakh lbs.

The question of protection to the woollen hosiery industry was examined by the Indian Tariff Board in 1935. The Board after careful consideration did not recommend any substantial protection to the same. Only in the case of socks and stockings, the Board recommended an alternative specific duty of Rs. 1-2-0 per lb. At first, the Government did not accept the recommendation but later imposed the same as a revenue measure.

Recently a representation on behalf of the woollen hosiery units of India, was made, to the Government for some protection to the industry owing to the high price and shortage of yarn It was refered to the Tariff Board by the Government of India for investigation, in October 1950. But the Board did not recommend any protection.

Every failure will teach us a lesson that we need to learn if we will keep our eyes and ears open and be willing to be taught. Every adversity is usually a blessing in disguise. Without reverses and temporary defeat, we would never know the sort of metal of which we are made.



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POWER TRANSMISSION

R. MEHTA

Way to effect a correct belt drive

EVERY factory or production centre has got a principal problem, as how to effect the transmission of available motive power from the source of availability to the machanism of production. Riding over this problem is one of the keys to success, in the field of production and any flaw in designing the transmission drives will not only be ineffective but also will seal the fate of every industrial undertaking

Many an agent of both physical and chemical forces are active against every attempt to harness the motive powers and he is the best designer who overcomes many of such agents wherever possible and make sufficient allowances for the remaining whose adverse actions are not surmountable. In designing the engineer should see that after all such allowances, the ultimate energy transmitted is slightly in excess of the actual requirement at the other end for which the scheme had been undertaken

Before attempting on the transmission the engineer would do well if he studies the following: —

1 Make and peculiarities of Production machanism
2. Power required at start and during running
3. Duration of each running period and period of rests between two consecutive running
4 Occurance of over loads and frequencies of such occurances.
5. Floor area available for the establishment of the drive contemplated.
6. Distance between the centre of the driving shaft to the centre of the driven shaft.
7. Any peculiarities of the drive such as direction of motion speed etc.

Having secured the above particulars the engineer shall proceed to selecting a suitable pulley for the drive.

Selection of pulley.

MATERIAL: Puleys are generally made of Cast Iron, Steel, wood or paper and in selecting the material for the pulley on the contemplated drive special attention should be paid on: —

1. The co-efficient of the belting on the pulley surface
2. Static electric energy generated on the drive and its storage.
3 Bore and Keyway details of the driving shaft and its length.
4 Speed required at the driven shaft. Generally the material thus chosen should be quite durable and must be able to stand the strain of the drive for which it is chosen.

DIMENSION: The diameter, face and arms of the pulley depends very much on the H.P. of the motor and the speed of the drive. This little article is not intended to give details of calculating the dimensions and as such we stop with saying that they should be so designed as to develop the required energy and that the face must also confirm to the peculiarity of the drive under contemplation

After selection of the pulley the drive should be designed. In doing so special attention should be paid to the centre distance, because this has a direct relation on the belt used. The next point to consider is the motion of the two shafts, driving and driven. If they are running parallel and in the same direction the drive will be an open one. On the other hand if the shafts be parallel and yet the motions be directly opposite, the drive to be chosen shall be a crossed one. In designing a cross drive the engineer shall have to consider the width of the beltings to be used and whether their ends shall rub against each other at the place of crossing. Should they rub the friction thus raised shall act at the ends and thus reduce the life of the beltings. In such cases Idler pulleys are recommended and the drive should be designed in one of the ways illustrated here under or in any other way best suited for the drive.

The driving and the driven shaft need not be parallel in all cases, and they may be in several other positions as well The position of such cases should be studied and as effective a drive as is possible should be prescribed Some such cases are illustrated and the engineer shalll be well versed with many more and shall apply the best suited for the job

After deciding the drive the next item to be attended to is the selection of the Beltings Two main items of manufacture of the beltings are vegitable meterial and animal meterial Each of these beltings have been found useful in particular cases and the Leather Beltings have been found useful universally Where the Leather Beltings have been manufactured to a high standard of quality they have been found the best for adoption

After selection of the meterial for beltings, the length, breadth thickness and density of the belting should be decided Several factors controll this matter including: —

1 The Belt slip and grip
2 The Arc of Contact.
3 Pulley surface
4 Belt Surface
5 Pulley diametre
6 Belt Speed

MOUNTING THE BELT FOR DRIVE.—Th writer has occasions to notice that in most o the cases mounting has not been done in th correct way Every Belting manufacturer insis that the mounting should be done in such a wa that the grain side of the belting should b nearer to the pulley surface This should b borne in mind while mounting the belting.

The drive is now established, yet the engineer job is not at an end He should look up th alinement of the pulleys from time to time fo possible replacement of position and adjust th same He should also see that the beltings a well dressed and kept free of all foreign matter Pulley faces may get soiled and they should b cleaned periodically There are many oth matters that are to be checked time and ofte A drive kept so shall be free of all difficulti and should work to the production programme

> *Just as a neglected garden is soon full of weeds so is a neglected company soon full of slackers and parasites.*

THE NEW MOVE IN LABOUR WELFARE

S. GHOSE

THE textile industry is the highest organised industry in this country The problems of industrial relations between employers and employees in this industry, as such, are greater in comparison with any other industries Obviously, schemes arrived at in this sphere of industrial relations amply focus the general nature of industrial life of the whole country and vice-versa

Past condition

Making a survey of the conditions of workers since the advent of machine age in India, one would unhesitatingly pronounce the opinion that the life of the Indian workers were not at all secured According to the report of the Royal Commission on labour in India "The industrial life tends to break down the joint family system Those workers who, at the beginning of their industrial career own a plot of land, are often unable to retain possession and, with the passage of years, the connection with the village becomes loosened. Workers in the main are unable to save out of their low earning against old age Those in intimate touch with the life of the workers know something of the misery in which many pass their old age It is appreciated that in this report it is impossible to make provisions for meeting every contigency in the life of the worker, but, the importance of this matter being generally admitted they feel it incumbent to recommend that, until such time as it is found practicable to institute either a general scheme of old age pensions or provident fund for industrial workers, Government should wherever possible, encourage employers by financial grants or other means to inaugurate schemes of this nature for their employees".

The Ray of hope

But this noble recommendation had not till recently received the attention neither of the employers nor of the Government The passing of the Employee's State Insurance Act as far back as in 1948 remain as a landmark in the history of Indian industrial relations. Of course, the labour policy of the Government of India since its inception after the Independence Act, created a logical atmosphere both among the employers and the employees, amidst a bitter relation which grew after the World War II, due to general sharp rise in the prices of all kinds of commodities, and when strikes and lockouts were frequently resorted to at the instance of slight provocation The Industrial Disputes Act, 1947 served as a right recipe to this nasty situation The result was manifested in less number of strikes and lockouts in coming years At the present moment, the habits of making negotiations and placing matters to Arbitration has replaced the old one of non-cooperation between employers and employees. It seems now that the situation is reached when the acts of reformation and promotion in the lot of the so long neglected workers of India can be performed And the Government has fully realised the situation and endeavours to make new legislation, such as, The Provident Funds Ordinance, 1951, in these directions.

Social Security Legislations

Employees State Insurance Act 1949—The inauguration of the Act was performed in February 1952, by the Prime Minister of India to start with the scheme will benifit 96,000 workers in 250 Kanpur factories and 55,000 workers from 400 Delhi factories. Other centres will be gradually brought under the scheme Bombay coming within its scope in January 1953, and practically all industrial centres of any magnitude and employing nearly 25 Lakh workers will be covered by the scheme by 1955.

Workers, whose monthly salary is less than Rs. 400/- will obtain sickness benefit in cash, free medical care and treatment, and maternity, disablement and dependants benefits. The expenses for implementing the scheme are to be borne by the Government of India, the Provincial Government and the employers. It is calculated that the employers may finally have to contribute about 5% of the total wage bill, while the Central Government accounts for two thirds of the expenses and the State Governments account for the cost of the health services.

The Employees Provident Funds Ordinance 1951—The ordinance seeks to make it compulsory for all factories engaged in any of the following industries, viz., cement, cigarettes, electrical, mechanical or general engineering products, iron and steel, paper and textiles (with provision to add to the test any more industries) employing more than 50 persons to introduce a provident Fund scheme for the benefit of all their employees. The scheme will embrace, in all, about 16 lakhs of workers. Employer's contribution will amount to 6¼ percent of basic pay and dearness allowance. Employees will have to make the same contribution though an option is given to them to contribute to the extent of 8⅓ percent Moreover, the contribution so made are protected against all sorts of attachment An allowance of three years has been provided for the factories which were established before or after the commencement of the ordinance, before administering the scheme, in order to make bold the position of capital of new industries

How far these two major schemes of social security legislation will be able to satisfy the workers as well as the employers is for time to judge But it must be said that the real and bold step has been taken by the Government of India after long years of deliberation in this direction. The principles behind the introduction of these bills are certainly laudable

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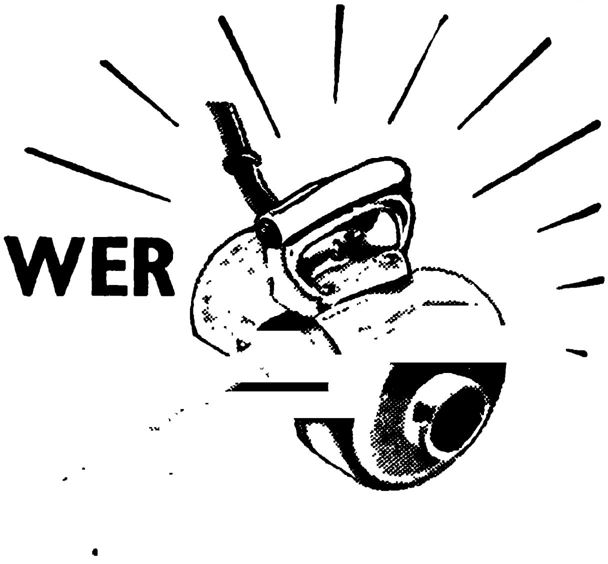

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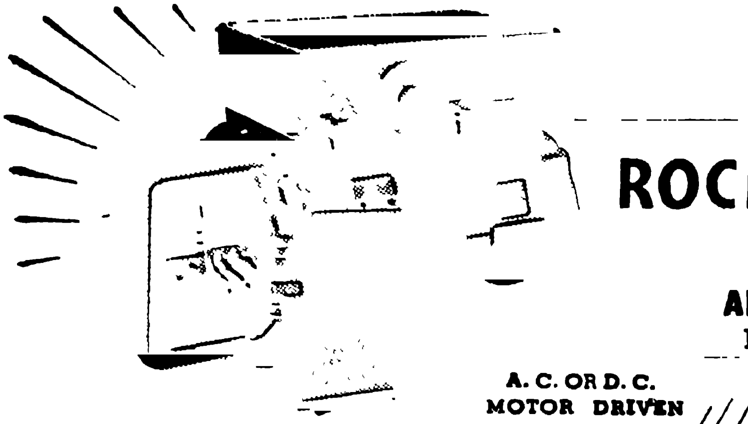

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TEXTILE TIT-BITS

Soviet Cotton Harvest in 1951

(1) According to the Soviet trade union newspaper *Trud*, the cotton harvest of 1951 in the U.S.S.R. exceeded the combined produced by India, Egypt and Pakistan.

Long Staple Cotton In West Bengal

(2) With the estimated cost of Rs 150 per acre, the Government of West Bengal, it is learnt, have decided to bring an area of 5,000 acres under long staple cotton cultivation. The tracts would lie in Midnapur, Bankura, Murshidabad, Nadia and Jalpaiguri The production of paddy would not be hampered by such cultivation as most of the tracts of lands are lying waste at present. It is also estimated that in order to be self sufficient, at least 3 lakh acres of land with an average yield of 6 maunds per acre would be required for West Bengal The present average All-India yield is three maunds per acre

More Cotton Mills In Pakistan

(3) It is learnt that plans have been finalized so that by April 1953, at best forty six mills will be in operation in Pakistan Of these eleven mills would be State-owned. The estimated production target has been fixed at 720,000 bales of cloth per year which will mean a per-capita provision of 12 yards per annum Of the eleven state owned mills, six will be installed in the Punjab, two in Sind, one in N W Frontier Province and two in E Pakistan

World Production of Cotton for 1951 52

(4) According to the monthly review of the International Cotton Advisory Committee, Washington, the world production for 1951-52 is estimated at 34.5 million bales—the second largest crop on record and 6 7 million bales or 24 percent larger than last season. The increase is entirely due to the much larger crops in the United States, Russia and China Production of extra-long and long staple cottons were affected by the lower yields in the Sudan and Egypt and the very poor North Brazilian crop

Licensing Exports of Cloth

(5) In August 1952, the Government of India had announced that exports of all varieties of cloth would be licensed freely valid for shipment to the end of December 1952 On a further review of the situation, it has now decided to allow such exports valid for shipment to the end of March 1953

Enquiry Committee for Kanpur Cotton Mills

(6) Entertaining the complain of labour spokesmen against millowners regarding retrenchment, the U P Government have decided to appoint a seven man enquiry committee to enquire into the rationalization of cotton mills in Kanpur

Floor Prices Of Cotton Raised

(7) A Government of India announcement on Oct 22, 1952 said that the Government had prescribed minimum and maximum prices in respect of various varities of Indian cotton (except H 420 and M A 5) for the season 1952-53 The floor prices applicable to the 1952-53 crop are Rs 55 higher than those applicable to the 1951-52 crop in respect of those varities which had floor prices during 1951-52 season.

No floor prices had been provided for Dhollera, Kalagan, Bengal Deshi, Oomra Deshi, Mathia and Mungari, C P I and C. P II and Central India cotton

Allocation Of Cotton To Mills

(8) It is learnt that for the 1952-53 cotton season each mill is likely to receive allocations of Indian cotton equivalent to its actual consump-

tion of this cotton during 1951-52 Initially, however, 33½% of this figure will be allocated in terms of state-wise imports Quantities of stock lying at mills as on Aug 31, 1952, will be treated as reserved

U. S. Cotton Crop

(9) The crop reporting board of the U S Department of Agriculture in its fourth crop report for the 1952 season estimates cotton production at 14,413,000 bales, and yield per acre 280,2 lbs

Pakistan's Jute Board's Profit

(10) According to the Pakistan Commerce Minister, the Pakistan Jute Board made a profit of about Rs. 2,32,00,000 in 1950-51

The Moncur Delegation

(11) The Indian Jute Mills Association have sent a goodwill delegation with Mr Moncur, Chairman, as the leader to the United States and Canada Explaining the object of the tour, Mr Moncur said at a Press Conference, "The importance of the export trade in jute manufactured goods to India's foreign trade is outstanding Last year jute goods represented 38% in value of the total export trade and 41% of the total exports to the U S A As against this jute's share of the total packaging markets in the U S A has been receding since the end of the war Consumption of jute bags in 1951 fell to less than 50% of what it was in 1947 As opposed to this the consumption of shipping sacks made with paper has doubled roughly in the same period and is about four times what it was in 1939 when less paper was used than burlap It is the continuence of this trend which represents the change in the jute industry's American market, and the public relations campaign is devised to draw the attention of consumers to the continuing advantage and economy of the burlap bag.

Hessian Order From Argentine

(12) An Argentine order was placed with I. J. M. A. for 16 crores yards of hessian to be supplied by June next year, according to a press note issued by the Association. It is also understood that the price agreed to is Rs. 49 per 100 yards for 40" × 10 Oz.f.a s Calcutta

Work of Jute Agricultural Research Institute

(13) In order to help the increasing yield per acre programme, the jute Agricultural Research Institute distributed to the various jute growing state, seeds at a subsidized rate of Rs. 50 per maund• At a recent meeting of the Indian Central Jute Committee, Sardar Datar Singh, Chairman, remarked that a pet scheme of the committee, that of popularising line-showing of jute, had apparently shown good result. About a hundred seed drills were distributed through the Agricultural Research Institute and the result achieved confirmed the advantages of line sowing of jute as against the traditional method of broadcast-sowing

An Important Research

(14) It is understood that a research carried out in the Technological Research Laboratories has made it possible to fully utilize every bit of of the fibre at a very low cost of about -/12/- per maund

Export of Jute Cloth to U.K.

(15) India exported 98,922,000 square yards, costing £7,887,763 to U K during 1st January and 31st August this year Last year's import of U K from India in the same period was 120,469,000 square yards costing £10,006,647.

Indian Jute Goods to S. Africa.

(16) Inspite of the ban imposed upon exports of Indian goods to South Afr.ca, a steady supply of the commodity to the country has been maintained This fact was disclosed by the London *Daily Telegraph's* Cape Town correspondent. It is understood that all the methods of re-export of the essential goods that South Africa needed were employed and the needs were supplied from Indian sources plentifully.

Prospect of Indo-Austrian Trade

(17) According to India's trade representative, Austria has been importing increasing-

quantities of jute The total for the last year was 9,022 tons She imported 3,485 tons in the first quarter of 1952 The suppliers were Italy, Switzerland, U.K and Brazil Besides, Austria imported 4,081 tons of hemp of which 10 tons were from India The representative says that there is sufficient demand of Indian hemp and that there is scope for increased supplies

Jute to serve 'Linen purpose'.

(18) Jute may soon take its place among the most fashionable and hardwearing clothing and furnishing fabrics, as a result of experiments carried out by a team of textile scientists at Leeds University Announcing this Mr A G Watkins, Secretary of the I J M A who with Dr H J Callow was responsible for the experiments which began about four years ago, said, "we aimed primarily at finding a bleaching process which would make jute pure white and keep white it become apparent that the fabric we could produce, with other modifications would have the 'feel' crispness and general appearance of linen"

Indo Pakistan Jute Trade in G. A. T. T.

(19) Mr L R S Sing, chief of the Indian delegation to the G A T T made a complaint against Pakistan's policy of discrimination but the discussion of the complaint was deferred as article 32 of the G A T T requires that bilateral consultation should take place between the two parties concerned prior to the matter being brought before a session of the G A. T. T

E. Bengal Jute Corp for 1952

(20) According to the final forecast of the Fast Bengal jute crop for the 1952 season, the total yield of the province is estimated at 6,822,740 bales

Hingher World Wool Production.

(21) World production of raw wool is expected to increase in 1952-53 for the fifth successive season, according to estimates by the Commonwealth Economic Committee It is provisionaly forecast at 4,000 million lbs (greasy), an increase of about 60 million lb or 1½% of last season

All India Handloom Board Set Up

(22) A Commerce and Industry Ministry resolution, published in a Gazette of India Extraordinary on Oct 25, 1952 says the Government have decided to set up a 16 member, All-India Handloom Board with the Textile Commissioner, Government of India, as chairman The resolution also proposes to create a Handloom Fund with the object of ensuring a steady and adequate supply of suitable yarn to the handloom industry; establishing marketing organisations in the country and abroad, promoting research improvements in designs etc, training of personnel arranging for improved equipments and encouraging co-operative effort among handloom weavers.

Committee Of Experts To Enquire Into Textile Industry.

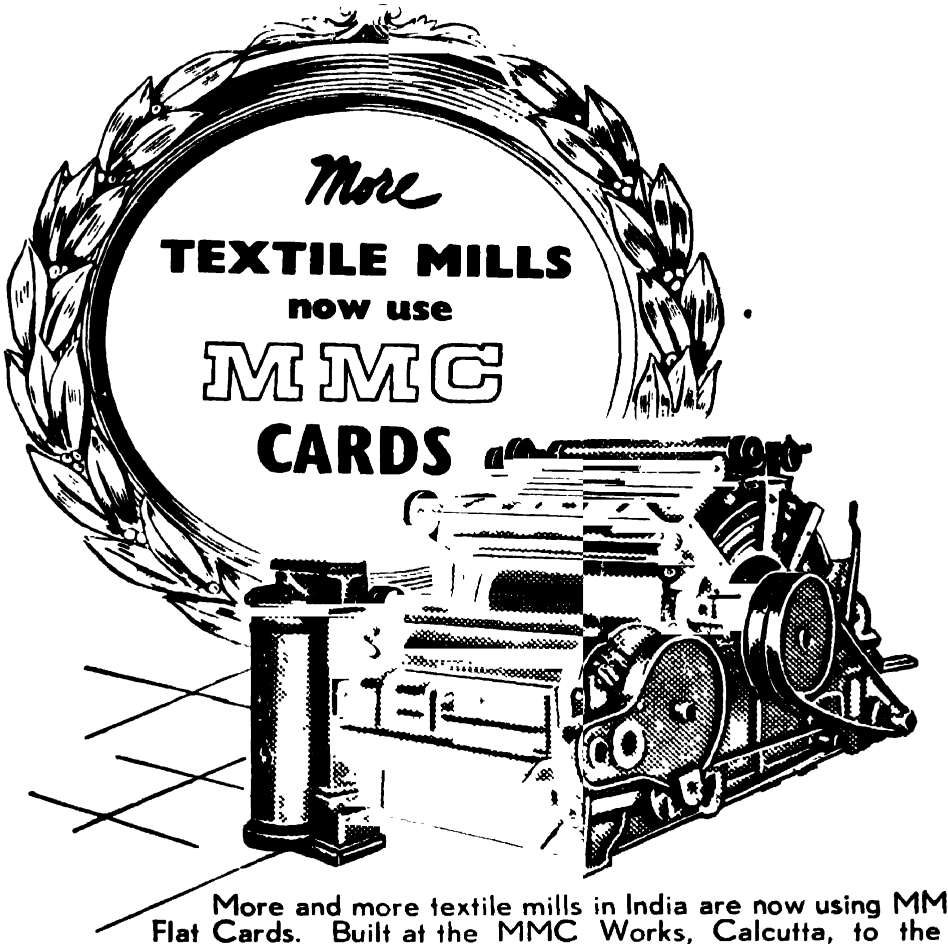
(23) For the first time a high-powered committee of experts will be set up by the Government of India to make a comprehensive enquiry of the whole field of textile industry, it is understood The committee is to be manned by three reputed economists

Japanese Dumping Fashion

(24) Japan has abolished quotas for exports of textiles to the sterling area with effect from the 18th October 1952 All export restrictions have been removed from textiles. Quotas will, however, be retained for textile exports to distribution centres, including Hong Kong and Singapur

World Population

(25) The population of the world has risen to 2,377 million, about 400 million more than the pre-war level, according to the W.H O.



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TEXTILE INDIA 1952

PART II

Section "A"

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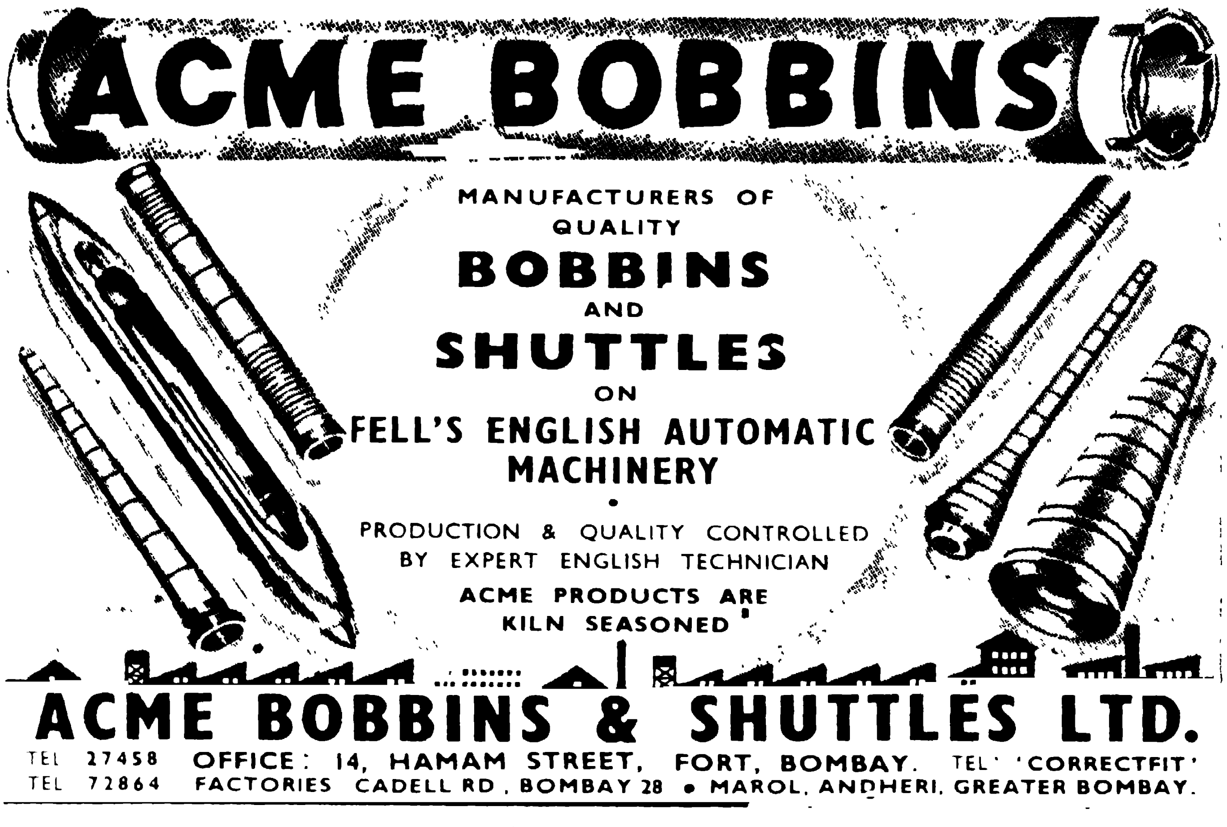

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A BIRD'S EYE VIEW OF COTTON TEXTILE INDUSTRY IN INDIA

No. of mills working in the Indian Union	445
No. of spindles installed as on 1-1-1952	10,999,225
No of looms installed as on 1-1-1952	194,567
No. of spindles working (as in March 52)	9,903,229
No. of Looms " " " " "	180,861
No. of workers engaged " " " "	789,571

Consumption of raw material and Production of Yarn and Cloth

Cotton consumed during the year 1951	1,365,220,000 lbs
Indian cotton consumed	70% of the total
Foreign cotton consumed	30% of the total
Production of yarn during 1951	1,303,861,000 lbs
Production of cloth during 1951	4,076,188,000 yds
Yarn consumed by composite mills during March, 1952	81,541,000 lbs
Cloth produced by composite mills during March, 1952	345,628,000 yds

Fibre

No. of spindles engaged on staple Fibre in March 1952	153,707
Average Production of Fibre yarn per spindle per shift	5.4 oz
Quantity of staple fibre yarn produced	1,296,5971
No of looms engaged on producing cloth from staple fibre yarn in March, 1952	1,331
Quantity of cloth produced from staple fibre yarn in March 1952	2,286,812

Post War Expansion

No of spindles alloted	1,374,000
No. of mills so far established and started working	48
No. of spindles so far installed	513,270
No. of looms " " "	7,913
Percentage of spindles so far installed of the total allotment.	37%

Handloom Industry

Total No of Handloom workers engaged	6 million
" " " " weavers	2.4 million
" " " Assistants engaged in the handloom weaving	3.6 million

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Acreage under cotton cultivation and cotton produced during the year 1950-51 & 51-'52

	Area (Thousand		Production (Thousand bales of 392 lbs. each)	
	1951-52	1950-51	1951-52	1950-51
Bengals	1,100	1,031	408	463
Americans	891	720	262	185
Oomras	4,197	3,341	893	553
Broach	870	787	130	154
Surti	384	310	66	71
Dholleras	1,698	1,626	192	391
Others	6,078	5,651	1,081	909
Total	15,128	13,466	3,032	2,726

i.e., 12.3% increase in area under cotton during 1951-52
& 13.6% increase out-turn of cotton during 1951-52

Import of foreign cotton in Bombay from 1st September, 1951 to 13th June 1952, with the corresponding period of last season :—

	In bales	
	1951-52	1950-51
Indian	603,265	619,251
American	823,652	237,783
Egyptian	91,648	166,352
East African	87,180	186,639
Sudans	28,080	32,420
Pakistan	302	6,939
Others	716	2,383
	1,634,843	1,251,767

COTTON PRICES

The varification of cotton prices during two months April, June, 1952

Varieties	April	June
	In Rupees per candy	
Berar Jharilla	560	675
Moglai Jharilla	450	560
Jayadhar	650	850
Laxmi	750	850
Vijay	725	780
Kala	425	570
Gujrat Wagad	490	620
Bengal	400	435
Western Raichur	500	600
Western Adoni	550	670
Surati	760	850
California	1525	1625

COTTON AND STAPLE LENGTH

Characteristics of Pakistan cotton :—

Variety	Staple length	Blow room loss %	Card room loss %	Spinning performance
Punjab Desi	8/16" - 10/16"	6 - 9	7 - 9	8s-10s reeling
Sind Desi	6/16" - 10/16"	4 - 7	6 - 9	8s-10s reeling
Comilla	6/16" - 8/16"	—	—	—
Punjab American 4F	12/16" - 14/16'	7 - 9	8 -10	20s warp
Punjab American 289 LSS	14/16" - 15/16"	5 - 9	6 -10	24s-28s warp
Punjab American 289F	15/16" - 1-1/32"	7 - 9	6 - 9	30s warp or 40s weft
Punjab American 149F	1" - 1-1/16"	7 -10	8 -10	35s warp or 45s weft
Sind N.T.	15/16"	8 -10	8 -10	30s warp

Egyptian cotton :—

Zagora	1-1/8" - 1¼"
Ashmouni	1-1/8" - 1¼"
Giza 30	1¼" - 1-3/8"
Karnak	1-16/32"
Giza 7	1-3/8' and above
Menoufi	-do-
Giza	-do-
Sakeli	-do-
Morad	-do-
Giza 23	-do-
Malaki Amoun	-do-

Characteristics of Indian cottons

Variety	Staple length 32nd inch	Bloom Room Loss (%)	Spinning performance
BENGALS			
United Provinces Desi	14 to 18	9 11	8's/10's reeling
Rajputana Desi	12 to 16	9.11	-do-
East Punjab Desi	14 to 18	9.11	-do-
Mollisoni	14 to 18	9 11	-do-
BROACH			
Broach Vijay	24 to 28	5.6	24's/26's warp
East Punjab/American 4F	24 to 26	8 10	20's warp
East Punjab/American L S S (including 216F)	26 to 28	6.10	24's warp
Surti/Suyog	28 to 30	7 8	24's/28's warp
Dholleras:—			
Wagad Lalio Kalagin	21 to 26	12 15	14's/18's warp
OOMRAS			
Berar Oomras	18 to 20	10	8's/12's warp
C P and Berar Verum	24 to 26	9	20's/22's warp
C P and Berar Americans (Buri)	28 to 30	9	28's warp
C P and (Nimar Oomras)	18 to 22	7.10	8's/16's warp
Central India Oomras	16 to 20	12 15	8's/12's warp
Malvi	22 to 24	10 12	14's/16's warp
Khandesh Oomras	24 to 27	9 13	22's/24's warp
Mathia	16 to 18	15	10's/12's reeling
Hyderabad Gaorani	28 to 30	6 13	24's/26's warp
Barsi and Nagar (including Hyderabad Oomras)	18 to 20	9 11	8's/12's reeling

(Continued)

(*Continuation*)

Variety	Staple length 32nd inch	Bloom Room Loss (%)	Spinning performance
SOUTHERNS			
Westerns (including Bijapur and Bagalkote Jowari)	22 to 26	11 13	16's warp
Hagari 1	26	10 12	24's warp
Northerns	26 to 28	8	22's warp
Nandyal 14	26 to 28	8	22's warp
Coconadas and Warangal	22 to 26	6 10	14's warp
Kumptas	22 to 28	14 16	14's/22's warp
Jayawant	26 to 29	12	26's warp
Dharwar/American (Gadag 1)	26 to 28	7 8	24's/26's warp
Cambodia	28 to 34	5 8	22's/32's warp
Tinnevellys	24 to 28	6 8	16's warp or 20's wef
Karunganmes	26 to 28	6 8	14's/18's warp
Nadam, Bourbon and Uppan (Salems)	22 to 26	6 8	14's/18's warp
OTHERS			
Comillas	12 to 14	6.8	8's/10's reeling
Chinnapathi	12 to 14	6 8	......

Statement showing the quantity of yarns spun in India

(*In thousands of pounds*)

India		Calendar year 1950	Calendar year 1951
1 to 10		86,758	87,758
11 to 20		555,148	614,210
21 to 30		176,132	224,120
31 to 40		214,128	218,299
Above 40		122 640	131,377
wastes	. . .	11,577	18,824
	Total	1,166,383	1,294,588

Characteristics of different types of cotton produced in different countries

Country	Variety	Average length (inch)	Colour	Counts up to which they can be spun	Remarks
Sea Island		1¾	Cream	300	Very silky and regular
Meade		1¾	Cream	120	Similar to above
Egyptian	Ashmouni	1-1/8 to 1¼	Light brown	60	
	Zagora	1-1/8 to 1-3/16	Light brown	60	
	Fouadi	1¼ to 1-5/16	Dark cream	80	
	Giza 7	1-3/8 to 1-7/16	Whitish	150	
	Maarad	1-5/8 to 2¾	Light brown	200	
	Sakellarides	1½ to 1-9/16	Dark cream	150	
	Sakha 4	1-3/8 to 1½	Whitish	150	
	Giza 12	1-5/16 to 1-3/8	Creamy	150	
Brazilian	Pernams etc	1-1/8	Dull white	60	Harsh
	Ceara etc	1	Dull white	60	Harsh
Peruvian	Rough	1¼	Cream }	for mixing with wool	Harsh & wiry
	Mod. Rough	1¼	Cream }		Harsh
	Smooth	1-1/8	White	60	
	Sea Island	1-3/8	Variable	100	Silky irregular
American	Orleans	1-1/8	White	60	Clean, soft, strong
	Texas	1	White	50	Clean, strong
	Uplands	1	White	50	Softest American
	Mobile	7/8	White	50	Dirtier and weaker than other American
Indian	Surtee) Broach etc)	7/8	Light brown	20	Clean dirty
	Scinde	5/8	Dull White	10	Poor dirty
	Bengal	5/8	Light brown	10	Dirty harsh
	Tinnevelly	7/8	White	20	
			Light brown	20	Fair class
China		3/4	Dull white	20	Clean harsh
Smyrna		7/8	Dull white	30	Rather harsh
West Africa		1	White	50	Similar to American.

BASANTI COTTON MILLS
LIMITED.

Mills :
Panihati
24 Parganas

Office :
24, Netaji Subhas Road
CALCUTTA—1

Production & consumption of raw cotton in Indian Union

	Year ending 31st August 1950 Thousands bales (400 lbs)	1951 Thousands bales (400 lbs)
Export to United Kingdom	12	28
„ to United States of America	63	73
„ to Australia	5	3
„ to other countries	143	80
Total	223	184
Home Consumption –		
Mills	2,541	2,517
Extra-factory or local	270	270
Total	2,811	2,787
Approximate crop	3,037	2,971
Estimated in forecast	2,970	2,926
Excess (+) or deficit( ) neglecting carry-over	+ 67	+ 45

Statement showing the stocks of cotton held by Indian Mills on 1st August 1951 and 1st Feb. 1952

(In bales regardless of weight)

	All-India 1-8-51	1-2-52
Cotton Mill Stocks — (In actual bales regardless of weight)		
(a) American (Linters and waste not included)	104,125	65,836
(b) Indian	1,063,038	816,576
(c) Egyptian	38,110	20,648
(d) Sundries	94,834	84,600
Total	1,300,107	987,660

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Import of cotton yarn into India

(Quantities in thousands of pounds)

Classification of yarn	Calendar year 1947	Calendar year 1948	Calendar year 1949	Calendar year 1950	Calendar year 1951
Grey Singles.—					
1s to 10s ..	—	—	10	—	2
11s to 15s	— —	1	—	—	—
16s to 20s	118	561	2,544	6	10
21s to 25s	—	—	30	—	—
26s to 30s	514	69	752	—	38
31s to 40s	161	147	6,301	64	115
41s to 50s	89	23	182	—	18
51s to 60s	333	565	3,159	16	47
61s to 100s	198	910	3,033	2,859	598
Above 100s	58	85	95	1	41
Grey two folds (Doubles) .	87	215	2,860	37	90
White (Bleached)	222	288	587	8	99
Coloured Singles —					
1s to 20s	—	5	15		
21s to 25s		-	—	—	—
26s to 30s	2	4	3	- -	—
31s to 40s .	-	—	— —	3	—
41s to 50s	—	3	3	—	—
Above 50s	61	54	41	2	9
Coloured two folds (Doubles)	-	—	9	—	5
Mercerised Cotton Yarn	44	101	425	11	63
Unspecified Description	1,720	7,262	1,494	142	269
Sewing Thread	1,455	2,107	2,270	277	1,194
Artificial Silk Yarn	12,550	25,415	51,700	20,708	48,481
Total ...	17,612	37,815	75,343	24,132	51,079

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NEW HIRA BAUG,
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AHMEDABAD.

Spindles and Looms set up in India, the United States of America, Great Britain, Germany, Japan & China

SPINDLES

Year	India	United States of America	Great Britain	Germany	Japan	China
1931	9,311,953	33,325,000	57,575,522	10,838,000	7,535,146	3,969,552
1932	9,506,083	32,109,000	53,443,684	10,233,000	7,964,850	4,497,902
1933	9,580,658	30,685,000	51 525,314	9,846,000	8,643,928	4,498,000
1934	9.613,174	30,329,000	47,182,560	9,900,000	9,530,574	4,904,788
1935	9,685,175	29,717,000	45,056,787	9,900,000	10,649,048	5,171,600
1936	9,856,658	28,598,538	42,641,685	9,900,000	12,139,408	5,172,000
1937	9,730,798	27,128,413	41.102,514	10,200,000	12,567,296	5,526,847
1938	10,020,275	25,934,590	38,807.925	11,065,000	12,776,220	5,635,068
1939	10,059,370	25,727,330	36.949,088	*13,000,000	12,278,233	5,635,068
1940	10,005,785	25,060,879	35,836,860	*13,000,000	12,278,233	5,635,055
1941	9,961,478	24,335,000	38,970,000	Not available	11,370,336	Not available
1942	10,026,425	23,971,000	Not available		Not available	
1943	10,130,568	23,401,000				
1944	10,222,107	23,293,000				
1945	10,238,131	23,128,000	38,690,000			
1946	10,305,169	23,862,000	38,210,000			
1947	10,353,973	23,824,000	37,320,000	.....	3,002,924	
1948	10,433,065	23,798,000	36,140,000	.....	3,441,036	
1949	10,103,451	23,407,000	35,000,000	.	3,736,200	
1950	10,849,026	22,995,000	34,470,000	..	4,381,147	
1951	11,240,635	23,183,000	34,120,000	...	6,366,501	

* Includes Austria and Sudetanland

LOOMS

Year	India	United States of America	Great Britain	Germany	Japan	China
1931	182,429	658,604	657,864	230 000	77,782	29,582
1932	186,341	646,764	624,629	230,000	79,277	33,580
1933	189,040	625,445	601,750	267,000	86,343	33,580
1934	194,388	608,850	560,153	225,000	91,146	42,596
1935	198,867	600,857	517,460	225,000	95,982	42,834
1936	200,062	575,366	499,703	225,000	100,543	42,834
1937	197,810	540,233	471,258	225,000	*332,564	52,009
1938	200,286	501,415	461,209	236,000	*332,564	58,439
1939	202,464	504,286	453,396	‡270,000	*253,587	58,439
1940	200,076	505,609	441,065		114,005	
1941	198,574		497,000†			
1942	200,170	522,127	505,000†		106,392	
1943	200,890	Not available	506,000†		Not available	
1944	201,761		508,000†			
1945	202,388		501,500			
1946	202,814		548,700			
1947	202,662	479,166	604,800		31,725	
1948	202,072	Not available	634,700		42,592	
1949	202,408		646,200		49,646	
1950	199,775	497,600	558,000		51,357	
1951	201,484	510,794	357,300		65,431	

* Includes Narrow width Looms † Looms in Lancashire area only ‡ Includes Austria & Sudetanland

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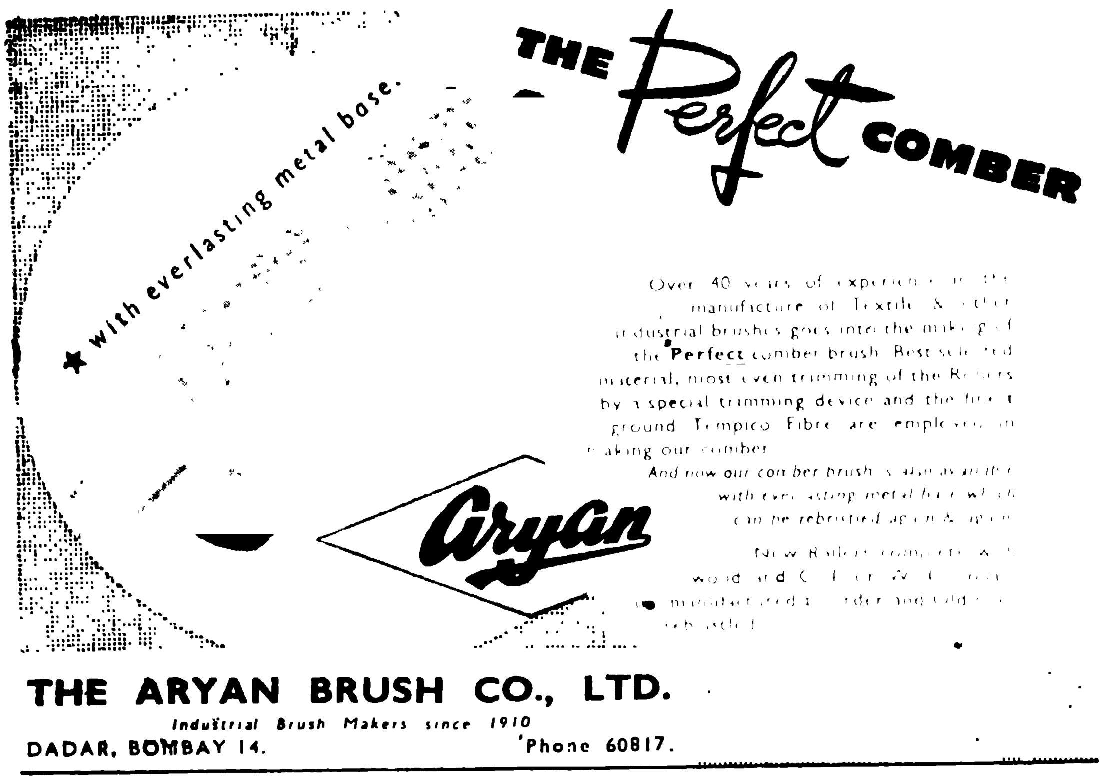

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Different types of fabrics & their typical quality particulars

BED TICKS are coloured stripe goods woven both satin and twill

Some quality particulars.—

Warp	Weft	Reed	Pick
18s	18s	3/44s i.e.) 66s)	44
18s	20s	90s	60

BROCADE is a fabric with woven figures and having more than one type of weaving structure in the cloth

One quality is—

Warp	Weft	Reed	Pick
34s	40s	100s	120

COATING is a plain, twill or fancy twill woven cloth Usually dyed used for suitings. Width varies from 27″ to 30″

Some quality ***particulars*****:**—

Warp	Weft	Reed	Pick
15s	15s	72s	52
19s	11s	46s	48
19s	11s	92s	52

CREPE is a puckered or crinkled fabric May be of plain weave and effect formed by the use of special hard twisted yarn It can be obtained from special type of weave known as Crepe weave.

DHOTIE is a plain cloth with a small coloured borders plain or figured Width varying from 44″ to 50″

Some typical quality particulars—

Warp	Weft	Reed	Pick
19s	24s	44s	46
30s	40s	52s	44
60s	80s	64s	56

DRILL is a strong heaving faced twill fabric with 3/1 weave used for dress materials. Width varies from 28″ to 30″.

Some quality particulars:—

Warp	Weft	Reed	Pick
11s	11s	4/32s or 64s	44
15s	11s	4/64s or 92s	52
15s	11s	3/48s or 72s	52

DORIA is a plain fabric with grey and coloured warp and weft with coloured borders used as a Saree. Width usually 48″.

Some quality particulars.—

Warp	Weft	Reed	Pick
68s	88s	64s	64
40s	50s	66s	40

DAMASK is a fabric of single structure formed by two satin weave (warp and weft) with figures developed in warp ground in weft satin weaves

DIAPER is a fabric based on 5 end Sateen weave, woven on the damask principle The pattern is of rectangular shapes either uniform or varied in size and shape repeated all over the fabric

DUCK is a heavy plain cloth used for tents and sail cloth may also used in suitings

One quality particular.—

Warp	Weft	Reed	Pick
3/40s	2/24s	50s	50

GINGHAM is a coloured woven fabric usually of check pattern Used for shirting and furniture coverings.

One quality particular —

Warp	Weft	Reed	Pick
24s	24s	60s	64

GABARDINE is a cloth having a whipcord twill (2/1 or 3/1 weave) used for dress materials and coatings Usually made from worsted warp and cotton weft It may be also a cotton gabardine with two fold warp and weft having 3/1 warp twill.

LONG-CLOTH is a fabric with plain weave Width usually range from 34″ to 36″ may even go up to 56″. Used for under garments

Some quality particulars·—

Warp	Weft	Reed	Pick
18s	18s	48s	44
30s	40s	72s	68
36s	38s	72s	72

LEOPARD CLOTH is a fabric with plain weave. Width about 54″

One quality particular:—

Warp	Weft	Reed	Pick
18s	18s	52s	48

LENO is a fabric in which open effect is woven by causing certain threads named doup threads to cross over one or more threads termed Standard threads

MULL is a plain cloth may be white dyed or printed. Width varies from 44" to 52"

Some quality particulars.—

Warp	Weft	Reed	Pick
42s	42s	64s	44
60s	50s	56s	48
70s	90s	52s	44

ORGANDIE is a light fabric of plain weave and with very stiff and crisp finish Width about 48"

Some quality particulars.—

Warp	Weft	Reed	Pick
80s	120s	88s	72
40s	60s	76s	68

POPLIN is a cloth with plain weave showing fine ribs accross the piece Used for shirting or blouse. They be white **and** mercerised or dyed and mercerised Width usually varies from 29" to 31".

Some quality particulars :—

Warp	Weft	Reed	Pick
32s	42s	80s	56
44s	44s	96s	64
44s	44s	120s	64

SAREE is a plain cloth with coloured border of 2" to 2-1/2" plain or figured Width varying from 44" to 52".

Some typical quality particulars :—

Warp	Weft	Reed	Pick
36s	40s	52s	48
58s	66s	68s	52
68s	88s	68s	40

SUSHI is a plain cloth mercerised and with coloured stripes or checks used for shirting. Width varies from 27" to 30".

Some quality particulars :—

Warp	Weft	Reed	Pick
38s	40s	80s	52
38s	40s	72s	44
44s	44s	96s	56

SHEETING is generally a plain cloth but may also be of 2/1 or 2/2 twill. Used for bed covering. Width 54".

Some quality particulars.—

Warp	Weft	Reed	Pick
22s	20s	56s	48
20s	24s	72s	68

SATIN is a fabric belonging to twill group of weave and having warp very much predominating over weft with intersections widely distributed A satin may be with 5 end repeat or with 8 end repeat The 8 end Satin is known in the trade as Venetian.

SATEEN is a weft faced cloth, the weft predominating over the warp The structure of the cloth belonging to twill group and intersections widely distributed

TWILL is a fabric with diagonal lines due to the structure of the cloth woven with warp and weft inter-section occuring with more than one thread Used for shirting and lining. Width 31"

One quality particular —

Warp	Weft	Reed	Pick
44s	41s	4/48s or) 96s)	88

VOIL is a plain cloth may be white, dyed or printed. Width varies from 44" to 52".

Some Typical quality particulars —

Warp	Weft	Reed	Pick
58s	66s	68s	52

Statement showing the various classes of piecegoods imported into India

(Quantities in thousands of yards)

Description	Calendar year 1949	Calendar year 1950	Calendar year 1951
PIECEGOODS :—			
Grey, unbleached (Plain & Bordered) :—			
Chadars	Nil	Nil	Nil
Dhuties, Saries etc.	128		...
Drills & Jeans	982	...	2
Flannels	Nil	Nil	Nil
Jaconets & Madapollams	1,753	. .	14
Longcloth	10,397	17	1
Printers	714	...	...
Sheetings	943	106	116
T-cloth and Domestics	Nil	Nil	Nil
Unspecified sorts	15,416	382	612
Total	30,333	505	775

Description	Calendar year 1949	Calendar year 1950	Calendar year 1951
WHITE BLEACHED.—			
Chadars	Nil	Nil	Nil
Checks, spots, and Stripes	177	80	4
Dhuties, Saries etc.	94	9	..
Drills and Jeans	1,196	76	48
Flannels	969	914	1,014
Embroidered All-Overs	18	20	..
Jaconets etc	8,625	565	201
Lawns	453	29	.
Longcloth and Shirtings	6,712	97	35
Mulls	4,193	187	2
Nainsooks	22	5	
Sheetings	35	2	.
T-cloth & Domestics	31	.	.
Twills	536	99	4
Unspecified sorts	1,736	359	364
Total ...	24,797	2,472	1,702

(Continued)

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(*Continuation*)

Description	Calendar year 1949	Calendar year 1950	Calendar year 1951
COLOURED, PRINTED OR DYED:—			
Cambrics	11,311	643	119
Chadars	3,231	53	31
Checks, spots & stripes . .			
Dhuties, Lungis & sarongs .	2	7	...
Drills & Jeans	1,134	3	226
Embroidered All-Overs ..	381	245	206
Flannels	161	. .	4
Prints & Chintz .. .	95	..	1
Saries and scarves ...	2	4	3
Shirtings	6,936	88	34
Twills . . .	3,287	1,277	2,440
Sateens	109	1	...
Coatings & Trouserings .	773	72	62
Italian cloth & sateens ..	2,602	976	2,472
Velvets & Velveteens	557	..	126
Unspecified sorts	5,673	542	402
Total ..	36,254	3,911	6,126
Fents of all kinds		*792	*176

*Is an approximation only on the basis that a lb of art. silk fents is equal to 8 yards.

Detailed Statement of the Quantity & Description of woven goods produced in Indian Mills

Description of goods	Calendar year 1940	Calendar year 1941	Calendar year 1942	Calendar year 1943	Calendar year 1944	Calendar year 1945	Calendar year 1946	Calendar year 1947	Calendar year 1948	Calendar year 1949	Calendar year 1950	Calendar year 1951
Grey & Bleach Piecegoods												
Chadars	59,633	58,898	37.002	41,626	51,157	38.334	39.452	27.523	38,992	41.411	20,018	22,860
Dhuties	8,129,092	964.358	723,111	1,023,608	1,037.815	1.144,414	1,228,778	1.229.852	1,350,683	1,161.220	600.950	1,020.143
Drills and Jeans	158,931	234,578	212,308	202,691	227,813	195,418	177,936	173.785	106.574	87,971	131,198	134.586
Cambrics and Lawns	240,183	218,818	223,546	243.171	265,123	183.404	120,833	108,078	221.254	148,654	232.520	188,801
Printers	17,248	14,528	20,880	26,031	26.518	40,990	27,181	26,536	37,678	28,238	73.687	42,329
Shirtings and Longcloth	950,843	1,077,295	1.034,276	1,340,736	1,369,937	1,208,806	1,010,755	890,573	1,141,291	923,107	968,373	1,126,257
T-cloth, Domestics & sheetings	172,263	211.389	218,989	249,461	255,884	256,142	282,905	199,065	244,268	213,840		
Tent Cloth	93,236	111,417	167,926	147,547	158,154	113,221	27,604	10,028	13,130	9,771	254.507	269.524
Khadi, Dungr' or Khaddar.	83,545	79,162	66.355	76,517	80,944	90,079	93,735	80,469	73.724	51,443	47,893	51,604
Other sorts	165,155	287,376	263,456	280,528	257,691	252,977	284,357	243,991	188,067	187,536	172,010	206,497
Total	3,070,129	3,328,729	2,968,089	3,631,916	3,731,036	3,523,785	3,193,546	2,989,900	3,415,661	2.853,191	2,501,156	3,062,601
Coloured piecegoods	1,022,039	1,201,949	1,056,637	1,117,580	1,118.957	1,187.863	831.354	819,829	1,006,858	952,516	1,143.515	1,125,317
* Grey and Coloured goods other than piece goods	1,748	3,183	1.760	1,816	2.160	2,494	1,046	819	1,221	1,238	1,186	1,569
+ Cotton Coods mixed with Silk or wool	10,741	10.437	3.013	2,462	2.083	925	513	769	1,841	1,687	2,209	2,355
Grand Total excluding of last two items	4,092,168	4,530,678	4,024,726	4,749,496	4,849,993	4,711,648	4,024,890	3,809.729	4,422.519	3,805,707	3,644,671	4,187.918

N. P. - Quantities above are in thousands of yards ; but * indicates thousands of dozons, & + indicates thousands of pounds

Summary of imports of cotton yarn into India

(*Quantities in thousands of pounds*)

(*Calendar year*)

Description of yarn	United Kingdom		Japan		China (Including Hongkong)		U.S. of America		Italy	
	1950	1951	1950	1951	1950	1951	1950	1951	1950	1951
Grey singles	87	331	1	10	6	55			1	343
Coloured singles	..	7	..	.	...	. .	..	.	.	. .
White Bleached	5	81	.	..	..	...	..	.	..	10
Grey folded	3	54	...	..	.	..	.	1		3
Coloured folded		3		.	.		.	..		...
Mercerised		14		.	.	..			.	3
Artificial silk	3346	3834	1529	11212	..				10011	20451
Unspecified description	39	82	1	40	60	29	1	.	10	60
Rope	1	1		.		..	...	. .		...
Sewing Thread	222	995		.	. .	..		.	21	103
Total	3703	5402	1531	11262	66	84	1	1	10073	20973

Description of yarn	Netherland		Germany		Switzerland		Other countries		Total	
	1950	1951	1950	1951	1950	1951	1950	1951	1950	1951
Grey singles		.		2	.	28	2851	100	2946	869
Coloured singles		..		..	4	2	.		4	9
White Bleached		.		...	.	3	8	5	13	99
Grey folded	. .	..	.	. .	8	26	21	6	87	90
Coloured folded	.	. .	. .	..	...	...	...	2	...	5
Mercerised	.	..	..	..	11	46	...	.	11	63
Artificial silk	1086	2470	102	2499	537	576	4097	7439	20708	48481
Unspecified description		..	..	.	...	...	...	59	141	269
Rope	.	. .	...	.	..	..	.	..	1	1
Sewing Thread	..	2	33	77	.	...	1	17	277	1194
Total	1086	2472	135	2578	560	681	6978	7627	24188	51080

TEXMACO

Manufacturers of the latest type Ring Spinning Frames.

RING FRAMES of any gauge, lift and number of spindles.
High Drafting 4 roller saddle weighted or self weighted.
Casablancas 500 or 500A
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Rising and Falling Lappets.
Ball Bearing to Tin Rollers.
Die Cast aluminium Separators.
Tin Roller diameter 10" or 11".

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Stationary to Rising and Falling Lappets.
Plain to Ball Bearing to Tin Rollers.

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SPINDLES with Plain or Roller bearing inserts.

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TIN ROLLERS of all sizes.

JOCKEY PULLEYS with Plain or Roller Bearings

SEPARATORS Die Cast aluminium.

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CORPORATION LTD.,
BELGHURRIAH, WEST BENGAL

Sales Centres at :
AHMEDABAD — COIMBATORE — BOMBAY — INDORE

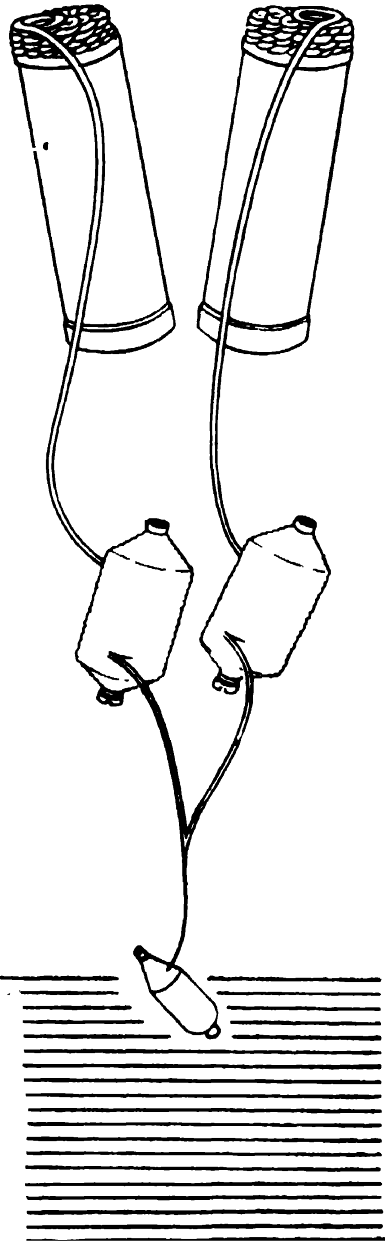
Progress of Cotton Mill Industry in India

	Average working Daily.		Cotton Consumed Bales of 392 lbs.	Yarn Spun. Bales of 400 lbs.	Cloth woven (in yds.)	Average No. of hands employed daily.
	Spindles	Looms				
	1	2	3	4	5	6
	Year	ending 31st	August	Yea ending	31st March	Year ending 31st August
1931	8,093,714	157.609	2,633,176	2,168,196	2,561,133,035	395,475
1932	8,323,082	151,340	2,911,264	2,416,016	2,989,891,101	403,226
1933	8,202,149	162,818	2,837,158	2,541,046	3,169,898,499	400,005
1934	7,845,077	158,802	2,703,990	2,302,652	2,945,051,727	384,938
1935	8,441,464	174,114	3,123,414	2,501,889	3,397,456,046	414,184
1936	8,504,406	177,935	3,109,618	2,645,742	3,571,370,903	417,803
1937	8,441,001	177,810	3,146,752	2,635,292	3,571,987,099	714,276
1938	8,901,635	183,308	3,662,648	2,898,781	4,084,276,363	437,690
1939	8,986,371	183,332	3,810,734	3,258,115	4,269,269,499	441,949
1940	8,847,326	178,842	3,679,874	2,084,216	4,012,529,025	430,165
1941	9,083,046	184,258	4,251,022	3,372,597	4,269,475,002	459,509
1942	9,165,812	184 665	4,740,722	3,942,944	4,493,613,208	480,447
1943	9,402,397	186,992	4,890,218	3,834,340	4,109,336,790	502,650
1944	9,493,784	189,241	4,843,112	4,201,156	4,870,686,903	504,401
1945	9,466,098	190,601	4,909,314	4,127,313	4,726,472,273	509,778
1946	9,548,295	186,505	4,549,932	4.037,042	4,675,334,321	495,456
1947	9,584,257	184,790	3,972,156	3,345,080	3,889,786,000	488,370
1948	9,580,227	185,360	4,282,974	3,324,448	3,770,016,543	476,145
1949	9,555,265	181,848	4,325,438	*3,685,845	*4,300,953,000	463,075
1950	9,517,980	181,196	3,789,494	3,225,845	3,850,364,427	433,816
1951	9,798,260	183,045	3,887,154	2,904,713	3,675,358,817	425,032

* Provisional

Casablancas
DRAFTING

FOR CARDROOM & SPINNING MACHINERY



THE INDIAN

CASABLANCAS HIGH DRAFT CO. LTD.

MANECKJI WADIA BUILDING 125 ESPLANADE ROAD
FORT BOMBAY

COTTON YARN TABLE

Weight in Grains of 120 yds.	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds.	Count of yarn
10.	100.0	17	58.82	24.	41.67	31	32.26	38.	26.32
1	99.01	.1	58.48	.1	41.49	.1	32.16	.1	26.25
.2	98.04	2	58.14	2	41.32	2	32.05	.2	26.18
.3	97.09	.3	57.80	.3	41.15	.3	31.95	3	26.11
.4	96.15	.4	57.47	.4	40.98	4	31.85	4	26.04
.5	95.24	.5	57.14	5	40.82	5	31.75	.5	25.97
.6	94.34	6.	56.82	.6	40.65	6	31.65	.6	25.91
7	93.46	7	56.50	7	40.49	7	31.55	.7	25.84
.8	92.59	.8	56.18	8	40.32	8	31.45	8	25.77
.9	91.74	.9	55.87	.9	40.16	.9	31.35	.9	25.71
11.	90.91	18	55.56	25	40.00	32	31.25	39	25.64
.1	90.09	.1	55.25	.1	39.81	.1	31.15	1	25.58
.2	89.29	.2	54.95	2	39.68	2	31.06	2	25.51
.3	88.50	3	54.64	3	39.53	3	30.96	3	25.45
.4	87.72	4	54.35	.4	39.37	4	30.86	4	25.38
.5	86.96	5	54.05	5	39.22	.5	30.77	5	25.32
.6	86.21	6	53.76	6	39.06	.6	30.67	.6	25.25
.7	85.47	.7	53.48	7	38.91	7	30.58	7	25.19
8	84.75	8	53.19	8	38.76	8	30.49	8	25.13
9	84.03	9	52.91	9	38.61	.9	30.40	.9	25.06
40	25.00	47	21.28	54	18.52	61	16.39	68	14.71
1	24.94	1	21.23	1	18.48	1	16.37	.1	14.68
.2	24.88	2	21.19	2	18.45	.2	16.34	2	14.66
.3	24.81	3	21.14	3	18.42	3	16.31	3	14.64
.4	24.75	4	21.10	4	18.38	.4	16.29	.4	14.62
5	24.69	5	21.05	5	18.35	.5	16.26	5	14.60
6	24.63	6	21.01	6	18.32	6	16.23	.6	14.58
.7	24.57	.7	20.96	7	18.28	7	16.21	.7	14.56
.8	24.51	8	20.92	.8	18.25	8	16.19	.8	14.53
.9	24.45	9	20.88	.9	18.21	.9	16.16	9	14.51
41.	24.39	48	20.83	55	18.18	62	16.13	69	14.49
.1	24.33	.1	20.79	1	18.15	.1	16.10	.1	14.47
.2	24.27	2	20.75	2	18.12	2	16.08	2	14.45
.3	24.21	3	20.70	.3	18.08	.3	16.05	.3	14.43
.4	24.15	.4	20.66	.4	18.05	.4	16.03	.4	14.41
.5	24.10	.5	20.62	.5	18.02	5	16.00	.5	14.39
.6	24.04	6	20.57	6	17.99	.6	15.97	.6	14.37
.7	23.98	.7	20.53	7	17.95	.7	15.95	7	14.35
.8	23.92	.8	20.49	8	17.92	.8	15.92	8	14.33
9	23.87	9	20.45	9	17.89	.9	15.90	9	14.31
42.	23.81	49	20.41	56	17.86	63	15.87	70.	14.29
.1	23.75	.1	20.37	1	17.83	1	15.85	.1	14.27
2.	23.70	.2	20.33	.2	17.79	2	15.83	.2	14.25
.3	23.64	.3	20.28	3	17.76	.3	15.80	.3	14.22

(*Continued*)

(*Continuation*)

Weight in Grains of 120 yds.	Count of yarn	Weight in Grains of 120 yds.	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds.	Count of yarn	Weight in Grains of 120 yds.	Count of yarn
.4	23.58	4	20.24	.4	17 73	.4	15.77	.4	14.20
.5	23.53	5	20.20	5	17.70	.5	15.75	.5	14.18
.6	23.47	.6	20.16	.6	17.67	.6	15.72	.6	14.16
.7	23.42	.7	20.12	.7	17.64	7	15.70	.7	14.14
.8	23.36	.8	20.08	.8	17.61	.8	15.67	.8	14.12
9	23.31	9	20.04	.9	17.57	9	15.65	.9	14.10
43.	23.26	50	20.00	57	17.54	64	15.62	71	14.08
.1	23.20	1	19.96	1	17.51	.1	15.60	1	14 06
.2	23.15	2	19 92	.2	17.48	2	15.58	.2	14.04
.3	23.09	.3	19.88	3	17.45	3	15.55	3	14.03
.4	23.04	4	19.84	.4	17.42	4	15.53	.4	14.01
.5	22.99	5	19.80	5	17.39	.5	15.50	.5	13.99
.6	22.94	6	19.76	.6	17.36	.6	15.48	.6	13.97
.7	22.88	.7	19.72	7	17.33	.7	15.46	7	13.95
8	22.83	.8	19 69	.8	17.30	.8	15.43	.8	13.93
.9	22.78	.9	19.65	9	17.27	.9	15.41	.9	13.91
44.	22.73	51.	19.61	58	17.24	65.	15.38	72.	13.89
1	22.68	1	19.57	.1	17.21	.1	15.36	1	13.87
.2	22.62	.2	19.53	.2	17.18	.2	15.34	.2	13.85
.3	22.57	3	19.49	3	17.15	.3	15.31	.3	13.83
.4	22.52	.4	19 46	.4	17.12	4	15.29	4	13.81
.5	22.47	.5	19.42	.5	17.09	5	15.27	5	13.78
.6	22.42	6	19.38	.6	17 06	.6	15.24	.6	13 77
.7	22.37	7	19 34	.7	17.04	.7	15.22	.7	13.76
.8	22.32	8	19.31	.8	17.01	.8	15.20	.8	13 74
.9	22.27	.9	19.27	.9	16.98	.9	15.17	.9	13.72
45.	22.22	52	19.23	59.	16.95	66.	15.15	73.	13.70
.1	22.17	.1	19.19	1	16.92	.1	15.13	.1	13.68
.2	22.12	.2	19.16	.2	16.89	.2	15.11	.2	13.66
.3	22.08	.3	19.12	.3	16.86	.3	15.08	.3	13.64
.4	22.03	.4	19.08	.4	16.84	.4	15.06	.4	13.62
.5	21.98	5	19.05	.5	16.81	.5	15.04	5	13.61
.6	21.93	.6	19.01	.6	16.78	.6	15.02	.6	13.59
.7	21.88	7	18.98	.7	16.75	.7	14.99	.7	13.57
.8	21.83	8	18.94	.8	16.72	.8	14.97	.8	13.55
.9	2179	.9	18 90	.9	16.69	.9	14.95	.9	13 53
46.	21.74	53	18.87	60	16.67	67.	14.93	74.	13.51
1	21.69	1	18.83	.1	16.64	.1	14.90	.1	13.50
.2	21.65	.2	18.80	.2	16.61	.2	14.88	.2	13.48
.3	21.60	3	18.76	.3	16.58	.3	14.86	.3	13.46
.4	21.55	.4	18.73	.4	16.56	.4	14.84	.4	13.44
.5	21.51	.5	18.69	.5	16.53	.5	14.81	.5	13.42
.6	21.46	.6	18.66	.6	16.50	.6	14.70	.6	13.40
.7	21.40	7	18.62	.7	16.47	.7	14.77	.7	13.39

(*Continued*)

(*Continuation*)

Weight in Grains of 120 yds.	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds.	Count of yarn	Weight in Grains of 120 yds.	Count of yarn
.8	21 37	8	18 59	8	16 45	8	14 75	8	13.37
.9	21 32	9	18 55	9	16 42	9	14 73	9	13.35
75.	13 33	82	12 20	89	11 24	102	9 80	116	8 62
.1	13 32	1	12 18	1	11 22	2	9 78	2	8 61
2	13 30	2	12 17	2	11 21	4	9 77	.4	8.59
3	13 28	3	12 15	3	11 20	.6	9 75	6	8.58
4	13 26	4	12 14	4	11 19	8	9 73	8	8 56
.5	13 25	5	12 12	5	11 17	103	9 71	117	8 55
6	13 23	6	12 11	6	11 16	2	9 69	2	8 53
7	13 21	7	12 09	.7	11 15	4	9 67	4	8 52
.8	13 19	8	12 08	8	11 14	6	9 65	6	8 50
.9	13 18	9	12 06	9	11 12	8	9 63	8	8.49
76.	13 16	83	12 05	90	11 11	104	9 62	118	8 47
.1	13 14	1	12 03	2	11 09	.2	9 60	.2	8 46
.2	13 12	2	12 02	4	11 06	4	9 58	4	8.45
.3	13 11	3	12 00	6	11 04	6	9 56	6	8 43
.4	13 09	4	11.99	8	11 01	8	9 54	8	8.42
.5	13 07	5	11 98	91	10 99	105.	9 52	119.	8 40
.6	13 05	6	11 96	.2	10 96	2	9 51	2	8.39
7	13 04	7	11 95	4	10 94	4	9 49	4	8.38
8	13 02	8	11 93	6	10 92	6	9 47	6	8 36
9	13.00	9	11 92	8	10 89	8	9 45	8	8 35
77.	12 99	84	11 90	92	10 87	106	9 43	120	8 33
.1	12 97	1	11 89	.2	10 85	.2	9 42	2	8 32
.2	12 95	2	11 88	4	10 82	4	9 40	4	8.31
.3	12 94	3	11 86	6	10 80	6	9 38	6	8 29
.4	12 92	4	11 85	8	10 77	8	9 36	8	8.28
.5	12 90	5	11 83	93	10 75	107	9 35	121	8.26
.6	12.89	6	11 82	.2	10 75	2	9 33	2	8.25
.7	12 87	7	11 82	4	10 71	4	9 31	.4	8.24
.8	12 85	8	11 79	.6	10 68	.6	9 29	6	8.22
.9	12.84	9	11 78	.8	10.66	.8	9.28	8	8.21
78.	12.82	85	11 76	94	10 64	108	9 26	122.	8.20
.1	12.80	1	11 75	.2	10.62	.2	9.24	.2	8.18
.2	12.79	2	11 74	.4	10.59	.4	9.23	.4	8.17
.3	12.77	3	11 72	6	10.57	.6	9.21	6	8.16
.4	12.76	.4	11.71	.8	10 55	.8	9 19	.8	8.14
.5	12 74	.5	11.70	95.	10.53	109	9.17	123	8.13
.6	12.72	6	11 68	2	10.50	.2	9 16	2	8.12
.7	12.71	.7	11.67	.4	10.48	4	9.14	4	8.10
.8	12.69	8	11 66	.6	10.46	6	9 12	6	8.09
.9	12.67	9	11 64	.8	10 44	.8	9.11	.8	8 08
79.	12.66	86.	11 63	96.	10 42	110	9.09	124.	8.06
.1	12.64	.1	11.61	.2	10.40	2	9.07	.2	8 05
.2	12 63	.2	11.60	.4	10.37	.4	9.06	.4	8 04

(*Continued*)

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TRADE MARK

(*Continuation*)

Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds	Count of yarn	Weight in Grains of 120 yds.	Count of yarn
3	12.61	3	11.59	6	10.35	.6	9.04	.6	8.03
4	12.59	4	11.57	8	10.33	.8	9.03	8	8.01
5	12.58	5	11.56	97	10.31	111	9.01	125.	8.00
.6	12.56	6	11.55	2	10.29	2	8.99	2	7.99
.7	12.55	7	11.53	4	10.27	4	8.98	4	7.97
8	12.53	8	11.52	.6	10.25	6	8.96	6	7.96
9	12.52	9	11.51	8	10.22	8	8.94	.8	7.95
80	12.50	87	11.49	98	10.20	112	8.93	126	7.94
1	12.48	1	11.48	2	10.18	2	8.91	.2	7.92
2	12.47	2	11.47	.4	10.16	4	8.90	4	7.91
3	12.45	3	11.45	.6	10.14	6	8.88	6	7.90
4	12.44	4	11.44	8	10.12	8	8.87	8	7.89
5	12.42	5	11.43	99	10.10	113	8.85	127	7.87
6	12.41	6	11.42	.2	10.08	2	8.83	.2	7.86
7	12.39	7	11.40	4	10.06	4	8.82	.4	7.85
8	12.38	8	11.39	6	10.04	.6	8.80	.6	7.84
9	12.36	9	11.38	8	10.02	8	8.79	.8	7.82
81	12.35	88	11.36	100	10.00	114	8.77	128.	7.81

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Table showing varieties of card clothing commonly used

Type of card	Foundation cloth	Width of fillets in inches
COTTON :—		
Cylinder) Doffer) Tops)	C.W.C. (cotton woollen cotton)	2″ and 1½″.
WOOLLEN CARDS :—		
Cylinder (swift))	Foundation thicker than 3 m m.	2¼ or 2″
Doffer)	fellet of certain ply cotton cloth.	2″ or 1¾″
Worker)		1¾″
Clearer)		1-3/8″
Fancy fillets	Vulcanized rubber or 6 ply cotton cloth	1-3/4″
Fancy Sheets	Thin leather or leather and fillet	1¾″
Feeder	Leather	1″
WORSTED CARDS :—		
Cylinder (swift))	4 Ply cotton cloth on rubber or	2¼″ or 2″
Doffer)	woollen cloth.	2″ or 1¾″
Worker)		1¾″
Clearer)		1½″
Fancy fillets	Vulcanized rubber on 4—6 ply cotton.	1¾″
COTTON WASTE :—		
Cylinder (swift))	Certain ply cotton cloth on fillet	2¼″ or 2″
Doffer)	foundation or half foundation or	2″ or 1¾″
Worker)	4 ply cotton cloth with rubber or	1¾″
Clearer)	5 ply cotton cloth.	1½″

COUNTS OF CARD CLOTHING ACCORDING TO THE COUNTS OF YARN TO BE SPUN

(1) All counts of yarn upto 24s below cylinder fillets 90s, Doffer 100s, Tops 100s.

(2) Counts of yarn 24s to 46s Cylinder fillets 100s, Doffer 110s, Tops 110s.

(3) Counts of yarn from 46s up to 120s Cyl inder Fillet 100s, Doffer 120s, Tops 120s.

N.B.—Counts of Card clothing means the number of teeth in foundation in a given unit. In the case of cotton cards the unit is 4″ × 1″

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Messrs. Mackinnon Mackenzie & Co., Karachi.
Messrs Binny & Co (Madras) Ltd. Madras

G.R. 359

BREAKING WEIGHTS OF CARDED WARP YARNS

Breaking weights based on F. P. Sheldon's formula
Breaking weights of 120 yard skeins in pounds

Count of Yarn	STAPLE OF COTTON								
	7/8″	15/16″	1″	1-1/16″	1-1/8″	1-3/16″	1-1/4″	1-5/16″	1-3/8″
1	1680.0	1856.0	2032.0	2208.0	2384.0	2560.0	2736.0	2912.0	3088.0
2	832.0	920.0	1008.0	1096.0	1184.0	1272.0	1360.0	1448.0	1536.0
3	549.4	608.0	666.7	725.4	784.0	842.7	901.4	960.0	1018.7
4	408.0	452.0	496.0	540.0	584.0	628.0	672.0	716.0	760.0
5	323.2	358.4	393.6	428.8	464.4	499.2	534.4	569.6	604.8
6	266.6	296.0	325.3	354.6	384.0	413.3	442.6	472.0	501.3
7	226.3	251.4	276.6	301.7	326.9	352.0	377.2	402.3	427.4
8	196.0	218.0	240.0	262.0	284.0	306.0	328.0	350.0	372.0
9	172.5	192.0	211.6	231.1	250.7	270.4	289.8	309.3	328.9
10	153.6	171.2	188.8	206.4	224.0	241.6	259.2	276.8	294.4
11	138.2	154.2	170.2	186.2	202.2	218.3	234.1	250.1	266.1
12	125.4	140.0	154.7	169.4	184.0	198.7	213.4	228.0	242.7
13	114.4	128.0	141.5	155.0	168.6	182.1	195.6	209.2	222.7
14	105.1	117.7	130.2	142.8	155.4	168.0	180.5	193.1	205.7
15	97.0	108.8	120.5	132.2	144.0	155.7	167.4	179.2	190.9
16	90.0	101.0	112.0	123.0	134.0	145.0	156.0	167.0	178.0
17	83.8	94.2	104.5	114.9	125.2	135.6	145.9	156.3	166.6
18	78.2	88.0	97.7	107.5	117.3	127.1	136.8	147.5	157.3
19	73.3	82.5	91.8	101.0	110.3	119.6	128.8	138.1	147.4
20	68.8	77.6	86.4	95.2	104.0	112.8	121.6	130.4	139.2
21	64.8	73.1	81.5	89.9	98.3	106.7	115.1	123.4	131.8
22	61.1	69.1	77.1	85.1	93.1	101.1	109.1	117.1	125.1
23	57.8	65.4	73.1	80.7	88.4	96.0	103.7	111.3	119.0
24	54.6	62.0	69.3	76.6	84.0	91.3	98.6	106.0	113.6
25	51.8	58.9	65.9	73.0	80.0	87.0	94.1	101.0	108.2
26	49.3	56.0	62.8	69.6	76.3	83.1	89.9	96.6	103.4
27	46.8	53.3	59.8	66.3	72.9	79.4	85.9	92.4	98.9
28	44.6	50.9	57.2	63.5	69.7	76.0	82.3	88.6	94.9

(*Continued*)

(*Breaking weights of carded warp yarns Contd.*)

Count of Yarn	STAPLE OF COTTON								
	⅞"	15/16"	1"	1-1/16"	1-⅛"	1-3/16"	1-¼"	1-5/16"	1-⅜"
29	42.5	48.6	54.6	60.7	66.8	72.8	78.9	85.0	91.0
30	40.6	46.4	52.3	58.2	64.0	69.9	75.8	81.6	87.5
31	38.7	44.4	50.1	55.7	61.4	67.1	72.8	78.4	84.1
32	37.0	42.5	48.0	53.5	59.0	64.5	70.0	75.5	81.0
33	35.4	40.7	46.0	51.3	56.7	62.0	67.3	72.7	78.0
34	33.9	39.0	44.2	49.4	54.6	59.7	64.9	70.1	75.3
35	32.5	37.5	42.6	47.6	52.6	57.6	62.7	67.7	72.7
36	31.1	36.0	40.9	45.8	50.6	55.5	60.4	65.3	70.2
37	29.8	34.6	39.3	44.1	48.8	53.6	58.4	63.1	67.9
38	28.7	33.3	37.9	42.6	47.2	51.8	56.5	61.1	65.7
39	27.5	32.0	36.5	41.0	45.5	50.0	54.5	59.1	63.6
40	26.4	30.8	35.2	39.6	44.0	48.4	52.8	57.2	61.6
41	......	29.6	33.9	38.2	42.5	46.8	51.1	55.4	59.7
42	......	28.5	32.7	37.0	41.1	45.3	49.5	53.7	57.9
43	......	27.5	31.6	35.7	39.8	43.9	48.0	52.1	56.2
44	......	26.6	30.6	34.6	38.6	42.6	46.6	50.6	54.6
45	.. ..	25.6	29.5	33.4	37.4	41.3	45.2	49.1	53.0
46	......	......	28.5	32.4	36.2	40.0	43.8	47.7	51.5
47	.....	......	27.6	31.3	35.0	38.8	42.5	46.3	50.0
48	......	......	26.7	30.4	34.0	37.7	41.4	45.0	48.7
49	......	......	25.8	29.4	33.0	36.5	40.1	43.7	47.3
50	......	......	25.0	28.5	32.0	35.5	39.0	42.6	46.1
51	......	......	.... ..	27.6	31.1	34.5	38.0	41.4	44.9
52	......	......	......	26.8	30.2	33.5	36.9	40.3	43.7
53	......	......	......	26.0	29.3	32.6	35.9	39.2	42.6
54	......	......	......	25.2	28.4	31.7	34.9	38.2	41.5
55	......	......	......	24.4	27.6	30.8	34.0	37.2	40.4
56	......	......	......	23.7	26.9	30.0	33.2	36.3	39.4
57	......	......	......	23.0	26.1	29.2	32.2	35.3	38.4
58	......	......	......	22.3	25.4	28.4	31.5	34.5	37.5
59	......	......	......	21.7	24.7	27.7	30.7	33.7	36.6

(*Continued*)

Breaking weights of carded warp yarns (Contd.)

Count	STAPLE OF COTTON								
of Yarn	⅞″	15/16″	1″	1-1/16″	1-⅛″	1-3/16″	1-¼″	1-5/16″	1-⅜″
60	. .	..	....	21.0	24.0	26.9	29.8	32.8	35.7
61	....	..	..	.....	23.3	26.2	29.1	32.0	34.9
62	....	...	....	......	22.7	25.5	28.4	31.2	34.1
63		..	. .	.....	22.1	24.9	27.7	30.5	33.3
64	.. ..	.....	......	......	21.5	24.3	27.0	29.8	32.5
65	.. .	......	......	......	20.9	23.6	26.3	29.0	31.7
66	....	....	......	.....	20.3	23.0	25.7	28.3	31.0
67	...	.....	......	.....	19.8	22.4	25.0	27.7	30.3
68	...		......	....	19.3	21.9	24.5	27.1	29.7
69	.	. ...	......	......	18.8	21.3	23.9	26.4	29.0
70	.	...	. ...	..	18.3	20.8	23.3	25.8	28.3
71	....	......	. ...	..,	17.8	20.3	22.8	25.3	27.7
72	.. .	.. .	. ..	.....,	17.3	19.8	22.2	24.7	27.1
73	. ....	....	......	. ...,	16.9	19.3	21.7	24.1	26.6
74	......	.....	.....	.. .,	16.4	18.8	21.2	23.6	25.9
75	......	......	......	.....,	16.0	18.4	20.7	23.1	25.4
76	.....	......	......	.....,	15.6	17.9	20.2	22.5	24.8
77	......	......	. .	....,	15.2	17.5	19.7	22.0	24.3
78	......	......	......	.....,	14.8	17.1	19.3	21.6	23.8
79	......	......	......	....,	14.4	16.6	18.8	21.0	23.3
80	.....	......	......	.....,	14.0	16.2	18.4	20.6	22.8

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PURPOSE OF HUMIDITY IN COTTON SPINNING

DEW POINT:—It is the temperature at which the saturation vapour pressure is equal to the actual vapour pressure of the water vapour in the air.

HUMIDITY:—It is the amount of water vapour contained in a given sample of air.

ABSOLUTE HUMIDITY:—It is the actual weight of water vapour per unit volume of air, expressed in grain per cubic foot

RELATIVE HUMIDITY.—It is the ratio of the absolute Humidity (that is the actual weight of water vapour) of a given volume of air to its maximum possible humidity at the same temperature and pressure This is expressed in percentage.

1 Cotton being a Hygroscopic material is more readily worked in the courses of mechanical processing when relatively moist and more pliable than when in dry state.

2 Moist air diminishes the generation of dust and fly

3 The humidified air prevents the generation of static electricity. Moist air being a better conductor of static electricity tends to dissipate static charges.

4 Humidification exerts a strong and very desirable cooling effect upon the factory atmosphere in hot weather.

Relative humidity required in different departments in a cotton spinning and weaving mill given below:—

Department	Relative humidity in percentage.
1. Carding ..	50 to 55
2. Combing	60 to 65
3. Roving	55 to 60
4 Spinning ...	60 to 65
5 Warping and Winding ...	75 to 80
6. Weaving	80 to 85

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COTTON TEXTILE MILLS IN INDIA

[* *Cotton consumed by the mills indicate the approximate quantity of cotton consumed during the year 1951 in candies of 784 Lbs.*]

WEST BENGAL

Adarsha Cotton Spg. & Wvg. Mills Ltd., (No 2) Suryyanagar, Asansole, West Bengal. Mg. agents-Eskebasu & Sons Ltd., 41, Chowringhee Road, Calcutta. Spindles-8,000, Looms-150.

Arati Cotton Mills Ltd., Dassnagar. Mg. Agents-Das Brothers, 29, Strand Road, Calcutta, Spindles-4, 860 ring, Looms-172. Products—Dhoti, Saree Etc. Count-22s to 40s. Spg. Mstr- S. J Roy. Wvg. Mstr—S. K. Basu. Cotton consumed 526 Candies.

Banga Sri Cotton Mills Ltd., (The), Sodepur, P. O. Sukhchar, 24, parganas. Secs. and Agents—Shaha Choudhuri & Co. Ltd , Ph :—Barrackpore 31. Spindles—10,728 ring. Looms—276 Products—Grey—longcloth, Saree, Dhoti. Cloth width—28-48 in. Connts—19s, 24s, 36s, 40s, 44s, 60s, 62s, 80s. Spg Mstr—S N. Sarkar. Wvg Mstr—L. M. Sen. Cotton consumed 1,704 Candies.

Bangeswari Cotton Mills Ltd., (The), Serampore, Hooghly Mg. Director—D N. Nath Law. Office—63, Radha Bazar Street, Calcutta. Ph. (office) Bank 4976. Spindles—9,800. Looms—300 Products—Grey—Saree, Dhoti, Markin. Counts - 20s to 36s single & double cotton yarns. Spg. Mstr—R. N. Mukherjee, Wvg. Mstr—S. N. Chatterjee. Cotton consumed—1,256 Candies.

Bangodaya Cotton Mills Ltd., (The). Panihati, 24, Parganas. Mg. Agents—Ranjit Ltd., Ph—Barrackpore 153 . Looms - 340. Products--Grey Saree & Dhoti & Dyed Shirting. Cloth width-. 36 -45 in. Wvg. Mstr—N. M. Dutta

Basanti Cotton Mills Ltd., (The), Barrackpore Trunk Road. Panihati, 24, Parganas. Mg. Agents—The Calcutta Agency Ltd., 24, Netaji Subhas Road, Calcutta. Ph :—(office) Bank 7063. (Mill) Barrackpore 27. Spindles ..12, 664, Loom... 356. Products ..Saree, Dhoti, Markin Counts—35s/58s. Spg. Mstr—N. S. Tendulkar. Wvg Mstr—K. T. Uplap. Cotton consumed—1,655 Candies.

Bengal Belting Works Ltd., (The), Bose Para Lane. P. O. [Mahes, Hooghly. Office—2, Dalhousie SQ (East), Calcutta. Ph. (Office) City 1951 & 1952, (Mill) Serampore 327. Looms—104. Products--Cotton belting, Hair belting, Cotton Cenveyer & Webbings. Counts— 10s. Spg Mstr- R. De.

Bengal Fine Spg. & Wvg. Mills Ltd., Konnagar, Hooghly. Mg. Agents—P C. Nawn & Bros. Ltd., 7, Bowbazar Street, Calcutta. Spindle.—13,680.

Bengal Luxmi Cotton Mills Ltd, (The), Mahesh. Hooghly. Mg Agents—The Bengal Textile Agency Ltd ., 7, Chowringhee Road, Calcutta. Ph. (office) City 1301, (Mill) Serampore 384 Spindles—26,632 ring, Looms—936 Products—Grey-Saree, Shirting, Dhoti, Markin Bleached- Malmals, Chhaddars, twills, longcloth ; Dyed Shirting. Cloth width—24-60 in Spg-Mstr—K. C Chowdhuri. Cotton Consumed—3,816. Candies.

Bengal Textile Mills Ltd., Konnagar, Hooghly, Mg. Agents- D N. Choudhuri & Co. Ltd , 23, Hurrochunder Mullick Street, Calcutta. Spindle—15,000 (Proposed) Loom—5,000 (Proposed).

Bijoy Cotton Mills Ltd., Konnagar, Hooghly. Mg. Agents--Hunatsingka & Sons Ltd., 6, Old Post Office Street, Calcutta. Spindles—20,000 (Proposed).

Bowreah Cotton Mills Co. Ltd., [The), Bowreah, Howrah, Mg Agents—Kettlewell, Bullen & Co. Ltd., 21, Strand Road, Calcutta Ph.—(Office) Bank 4901, (Mill) Howrah 388. Spindle—42,872. Looms—841. Cotton Consumed—3,673 Candies,

Dhakeswari Cotton Mills Ltd., (No. 3), Suryyanagar, P. O. Burnpur, Dt. Burdwan. Mg. Agents—Eskebasu & Sons Ltd., 41, Chowringhee Road, Calcutta. Spindle—7,000 ring. Looms—80. Cotton consumed 61 Candies.

D. N. Choudhury Cotton Mills Ltd., Near Asansole. West Bengal. Sec. & Agents-Choudhury Industries Ltd., 23, Hurrochunder Mullick Street, Calcutta. Spindle-8,000 (Proposed). Looms-150 (Proposed).

WEST BENGAL—*Cotton Mills (Contd.)*

Dunbar Mills Ltd., (The), Shamnagar, 24, Parganas. Mg. Agents—Kettlewell, Bullen & Co. Ltd., 21, Strand Road, Calcutta. Ph:—(mill) Bhatpara 50. Spindle—42,944 Looms—518. Cotton consumed —4,521 Candies.

East India Cotton Mills Ltd., Mourigram, Howrah. 129. Maharshi Debendra Road, Calcutta. Looms 96

Hindusthan Cotton Mills Ltd., Belgharia, 24, Parganas. Office—Calcutta National Bank Bldgs, P-2. Mission Row Extn., Calcutta. Looms—120. Products—Saree Dhoti, Longcloth. Cloth width —40-46 in.

Hooghly Cotton Mills. Rishra, Hooghly. Mg. Proprietor—A. K. Sen Looms—53. Wvg. Mstr.— A. K. Sen.

Howrah Cotton Mills Ltd.. Belgachia, Howrah. Mg. Agents—A. K. Mondel & Sons, 146, Balilious Road, Howrah. Spindle—6,000; Looms— 100.

Kalyan Spg. & Wvg. Mills Ltd., Birati, Dum Dum Cant. Mg. Agents—A. K. Choudhury & Co. Ltd., 87, Dharamtala Street, Calcutta. Ph:—(office) Central 3194, (Mill) Dum Dum 231. Spindle 12,125. Counts—20s to 40s. Spg. Mstr.—R. N. Mukherjee. Cotton consumed—855 Candies.

Keseram Cotton Mills Ltd., (The), 42, Garden Reach Road, 24, Parganas, Calcutta. Mg. Agents— Birla Bros. Ltd., 8, Royal Exchange Place, Calcutta. Ph:—(office) Bank 3411, (Mill) South 1243, 1236 & 2584. Spindles—69,352. Looms—1,990. Products—Grey, Bleached & Dyed cambric, "D" Adhi, Dhoti, Khaki-drill, Mul Mul, Dosuti, Saree, Poplin, Twill, Shirting. Cloth Width—18-100 in. Counts—10s, 20s, 26s, 30s, 40s, 60s, 80s, & 100s. Spg. Mstr.—B. K. Rana. Wvg. Mstr.—A. K. Iyenger. Cotton consumed—19,807 Candies.

Mahalaxmi Cotton Mills Ltd., (The), P. O. Bengal Enamel, 24, Parganas ; Office—15, Netaji Subhas Road, Calcutta. Ph—(office) Bank 5112, (mill) Barrackpore 40. Spindle—5,788. Looms—169. Products—Saree, Bandage cloth, calico, Pagri cloth, twill, dhoti, etc., Cloth width—30-52 in. Counts—20s/45s. Spg. Mstr.—P. K. Mitra. Wvg. Mstr.—R. C. Dutta. Cotton consumed—1,079 Candies.

Manindra Mills Ltd., Cossimbazar, Murshidabad. Ph: —Berhampore 81. Mg. Agents—Choudhury Roy & Co. Ltd., Calcutta. Looms—182, Products —Cotton—Saree & Dhoti; Silk—Pure Murshidabad silk clothes & Printed Saree & Dress Cloth. Wvg. Mstr —R C. Goon.

Mohini Mills Ltd., (The), (No 2), Belghurriah, 24, Parganas. Mg. Agents—Chakravorty Sons & Co., 22, Canning Street, Calcutta. Ph—(office) Bank 6481. Spindle—23,112. Looms—439. Products— Saree, Longcloth, Dhoti, Mosquito Netting, Bed Sheets & Shirting. Cloth width—33-48 in. Counts—20s to 60s. Spg. Mstr.—R. N. Rakshit. Wvg. Mstr.—H. N. Sen. Cotton consumed—3,084 Candies.

Rampooria Cotton Mills Ltd, Serampore, Hooghly. Mg. Agents—Hazareemull Heeralal, 148, Cotton Street, Calcutta. Ph—(office) Jorasanko 1205. (Mill) Serampore 391. Spindle—23,196 Loom—795, Products—Saree, Chaddar, Markin, Longcloth, dhoti Etc. Cloth width—25-45 in. Counts —18s, 20s, 22s, 44s, 58s, 64s. Spg. Mstr —S. N. Tata. Cotton consumed.—5,099 Candies.

Shree Hanuman Cotton Mills Co, Fuleshwar, P. O. Uluberia, Howrah. Prop—Partabmul Rameshwar & Nursing & Co. 46, Strand Road, Calcutta, Ph— (Mill) Howrah 733. Spindle—24,196. Spg. Mstrs. —A. Chatterjee & V. V. Narayanaswami. Not working since 25th Nov. '49.

Shree Radha Krishna Cotton Mills Ltd., (The), (No 1), P. O. Ghusery, Howrah. Mg. Agents—Sadhuram Tularam, 29A, Sir Hariram Goenka St, Calcutta. Ph—mill. Howrah 682. Spindle—23,232. Not working since March, '49.

Shree Radha Krishna Cotton Mills Ltd., (The), (No 2). P. O. Belur Math, Howrah. Mg. Agents—Sad[illegible] Tularam. Sir Harıram Goenka St., Calcutta. Ph :—(mill) Howrah 125, Spindle—18,732. Looms—564.

Shree Radheshyam Mills Ltd., (The), 220, Naskarpara Road, Ghusery, Howrah. Mg. Agents— Sobharam Keshardeo, 135, Canning Street, Calcutta. Ph: (office) Bank 6055, (mill) Howrah 907. Spindle—45,366, Looms—417. Products— Grey— Chaddars, Calico, Gauza Cloth, Dosuti, Towels, Dhoti, bedsheets, Saree, Bleached —Mulls & Longcloth. Cloth width—27-54 in.

WEST BENGAL—*Cotton Mills* (*Contd.*)

Counts— 10s to 30s. Spg. Mstr.— S. C. Ganguly, Wvg. Mstr.— B. K. Ukil. Cotton Consumed— 4,573. Candies.

Siddheswari Cotton Mills Ltd., (The), P. O. Anantapur, Howrah. Prop :- M/s. Manna, Mondal & Mullick Co., Looms— 112. Products—Grey Saree & Dhoti. Cloth width— 39 49 in.

Sri Annapurna Cotton Mills Ltd., Shamnagar, 24, Parganas. Mg. Agents—Chakravarty Mukherjee & Co., 214, Cross Street, Calcutta. Spindle— 9,184. Counts - 20s, 26s, 40s, 60s. Cotton consumed 659 Candies.

Sri Durga Cotton Spg. & Wvg. Mills Ltd., (The), Konnagar, Hooghly. Mg. Agents—Choudhury & Co. Ltd., 23, Hurrochunder Mullick Street, Calcutta. Ph :— (office) Burra Bazar 6084, (mill) Serampore 330. Spindle—6,228. Looms—220. Spg. Mstr.—S. Son Wvg. Mstr.— S. K. Roy. Cotton consumed—997 Candies.

Swadeshi Industries Ltd, Panihati Mg. Agents— Annandram Gajadar, 33, Netaji Subhas Road, Calcutta. Looms—151.

Victoria Cotton Mills, (The). Ghusory, Howrah, Props—Partabmull Rameshwar & Nursing & Co, Strand Road, Calcutta. Ph—(office) Jorasanko 6183-84 (mill) Howrah 56. Spindle —12,304, Wvg. Mstr.— B C Sarkar. Cotton consumed 116 Candies. Not working since Oct. 1950.

Vidyasagar Cotton Mills Ltd., (The), Sodepur, 24, Parganas. Mg. Agents—The United Commercial Agency Ltd., 11, Callootola Street, Calcutta. Ph.—(mill) Barrackpore 136, Looms 160. Products—Saree, Shirting, Dhoti, Poplin, Longcloth. Cloth width... 28-46 in. Wvg. Mstr.—A. C. Sen

BIHAR & ORISSA

Bihar Cotton Mills Ltd., (The), Phulwari Sharif, Patna. Mg. Agents—Kashinath & Co, Ltd., 18, Canning Street, Calcutta. Ph—(mill) Phulwari Sharif Patna 448. Spindle—8,000, Looms—159. Products—bordered saree, longcloth, Dhoti, towel, coating, shirting. Cloth width... 45-50 in. Counts—12s to 30s, Wvg. Mstr.—S. R. Swami. Cotton consumed—892 Candies.

Gaya Cotton & Jute Mills Ltd, (The), Gaya, Bihar. Ph :—Gaya 79. Spindle—19,540. Looms— 586. Products—saree, longcloth, bedsheets, twill, dhoti, chaddar, shirting. Cloth width— 25-58 in, Counts—2s to 40s. Spg. Mstr.—N. Banerjee, Wvg Mstr.—M. N. Mitter. Cotton consumed—379 Candies.

Orissa Textile Mills Ltd., Ashokapatan. P. O. Cuttack. Mg. Agents—B. Patnaik & Co. Ltd., Spindle— 33,404. Looms—432. Cotton consumed—7,847. Candies.

BOMBAY ISLAND

Anvar Textile Mills Ltd., 220F, Reay Road & 175FF, Ripon Road, Bombay. Mg. Agents— Hasco Ltd., Bundeally Bldg., Sandhurst Road, East Dongri, Bombay. Ph:—Bombay 43215. Loom 346. Products—furnishing fabrics, suiting, poplin, sheeting, shirting, longcloth. Clothwidth—18-64 in. Wvg. Mstr.—S. P. Sabaria.

Apollo Mills Ltd., (The), Delisle Road, Bombay. Mg. Agents—The Rajputana Textiles (Agencies) Ltd., Standard Bldg., Hornby Road, Fort, Bombay. Ph—Bombay 40135. Spindle 45,500. Looms 898. Cloth width—33-43 in. Spg. Mstr—U. Ramchandra, Wvg. Mstr—N. Moses. Cotton consumed 9,198 Candies.

Beharilal Ramcharan Cotton Mills Ltd., Fergusson Road, Lower Parel, Bombay. Mg. Agents—B. R. Sons Ltd., Empire House, Hornby Road, Fort, Bombay. Ph—32913 (3 lines). (mill) 41815. Spindles 50,336. Looms 1,021. Products— grey, bleached & dyed—saree, drill, handkerchief, sheeting, mull, dhoti. Cloth width—35-57 in. Counts—13s to 80s. Spg. Mstr—S. Bhattacharjee, Wvg. Mstr—M. R. Chavan. Cotton consumed 5,846 candies.

Bombay Dyeing & Mfg. Co. Ltd., (The). (Spring Mills), Naigaum Road, Dadar, Bombay. Mg. Agents— Nowrosjee Wadia & Sons Ltd., Neville House, Graham Road, Ballard Estate, Bombay. Ph—(office)

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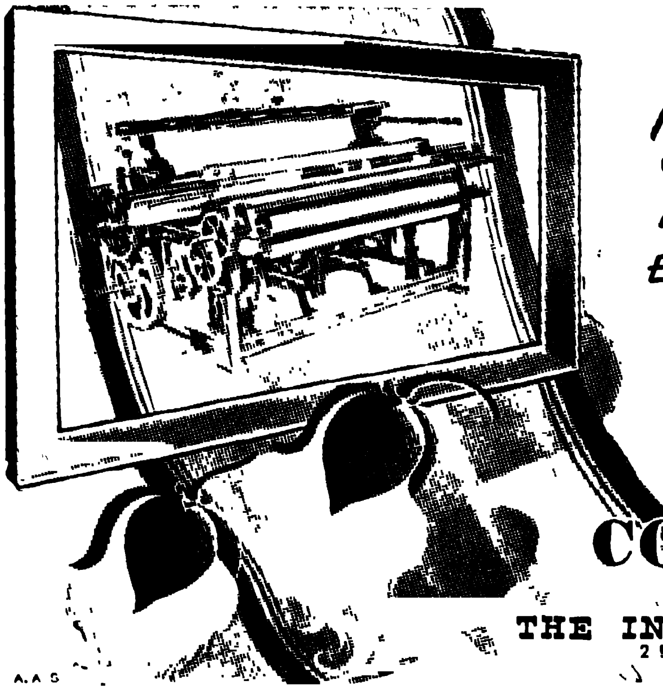

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BOMBAY ISLAND—*Cotton Mills* (*Contd.*)

25093 (3 lines), (mill) 60599 & 61244. Spindles—1.10,136, Looms 3,224. Products—grey—cotton cloths & dyed cotton piece goods ; coloured goods—sheeting, drill, dhoti, mull, twill Etc., Cloth width—27-90 in. Counts—10s to 34s. Spg. Mstr—H. Aston. Wvg. Mstr—L. Cheetham. Cotton consumed 12,156 Candies.

Bombay Dyeing & Mfg. Co. Ltd., (The), (Textile Mill), Elphinstone Road, Parel, Bombay. Mg. Agents—Nowrosjee Wadia & Sons Ltd., Neville House, Graham Road, Ballard Estate, Bombay. Ph—(office) 25093-5 & 32647, (mill) 60091-2. Spindle—71,936. Looms—1,631. Products—cloth-grey & bleached, plain & fancy, coloured cloth, dhoti, sheeting, twill, drill, mull, Etc., Cloth width 27-90 in. Spg. Mstr—A. E. Ainscow, Wvg. Mstr...E. N, Chosson. Cotton consumed 13,993 Candies

Bombay Textile Mills (Textile Manufacturers), Suryyodaya Mills Compound, Tardeo. Props—Praful Bros. Ph—(office) 40560, (mill) 45727. Looms—213. Products—sheeting, grey jean, longcloth, coating, canvas, webdrab, putties, Newars Etc., Cloth width—24-52 in. Wvg. Mstr—N. J. Poonawalla.

Bradbury Mills Ltd., (The), Ripon Road, Jacob Circle, Bombay. Mg. Agents—Ramnarain Sons Ltd., Imperial Bank Building, Bank Street, Bombay. Ph—(office) 30931-3, (mill) 40841. Spindle 38,208. Looms—860. Products—saree, poplin, coating, mulls, shirting, chaddar, lenos, cellulars, leopard, tussore, voil, bedford, crepe, Etc., Cloth width 24-58 in. Counts—4½ to 44s. Spg. Mstr V. S. Sant, Wvg. Mstr. B. J. Patel. Cotton consumed 5,656 Candies.

Century Spg. & Mfg. Co. Ltd., (The), Delisle Road, North (worli side), Parel, Bombay. Office—Queens Mansions, Prescott Road, Bombay. Ph:—30435 & 31904.. Spindle 1.09,320. Looms 2,685. Products—towel, dress material, handkerchief, twill, dhoti, voil, satin, mull, pyjamacloth Etc., dyed-satin, suiting, venetian, umbrella cloth, Etc printed - mull, chintz, satin, hair cord, Cloth width 24-84 in. Counts...75s to 140s Spg. Mstr. —M. D. Bharucha, Wvg. Mstr.—F. A. Hoyvoy. Cotton consumed 5,193 Candies,

Colaba Land & Mill Co. Ltd., (The), Victoria Bunder, Colaba, Bombay. Office—Mill premises. Ph—35350. Spindle—39,408. Looms—698. Products—white longcloth, bleached poplin, flannelettes, shadow-coating, mull, chaddar, limbric, grey shirting, domestic khadi Etc., dyed—poplin, shadow coating, dobby shirting, limbric, Etc., Cloth width 27-55 in. Spg. Mstrs.—H. W. Nailer, & R. J Jassawalla, Wvg. Mstr —J, P. Barsiwalla. Cotton consumed 5,319 Candies.

Coorla Spg. & Wvg. Co. Ltd., (The), Kurla, Bombay. Mg Agents—Cowasjee Jehangir & Co. Ltd., Ready Money Mansion. Veer Nariman Rd., Bombay. Ph:—(office) 20025, (mill) 87023. Sdindle—27,308 Looms—680. Products . shirting, longcloth, twill, drill, coating, Etc., Counts...10s to 40s. Spg. Mstr. R. N. Parekhji. Cotton consumed 5247 Candies.

Crown Spg. & Mfg. Co. Ltd., (The), Gokhale Road (south), Bombay Mg. Agents—Purshotam Vithaldas & Co., Sir Vithaldas Chambers, 16, Apollo Street, Bombay. Ph—Office 25153. Spindle 56,500, Loom 1,076, Products -Saree, Dhoti, Drill, Twill, crepe, voil, Etc., Cloth width—32, 60 in. Counts—20s, 30s, 40s, 60s, & 80s, Spg. Mstr—B. P. Bharucha, Wvg. Mstr.- A. N. Ghose. Cotton Consumed 6,439 candies.

Dawn Mills Co. Ltd., (The), Fergusson Road, Lower Parel, Bombay. Mg. Agents—Ramnarain Sons Ltd., Imperial Bank Bldg., Bank Street. Ph:—30931 (mill) 60156. Spindle 42,204. Cotton Consumed—3,237 Candies.

Dhanraj Mills Ltd., Sun Mill Road, Lower Parel, Bombay. Mg. Agents – Ramgopal Ganpatrai & Sons Ltd . Office - Mill premises, Bombay. Ph—(office) 45134, (mill) 40893. Spindle 36,316, Looms 786. Products—grey-longcloth, shirting, mull, dhoti, drill, Etc., bleached—dhoti, drill, saree, Etc., Cloth width 23-72 in. Cotton consumed 4,944 Candies.

Digvijay Spg. & Wvg Co. Ltd. (The), Lalbaug, Parel, Bombay. Agents—Jethabhai Khatau & Co. (Agencies) Ltd., Office—Mill premises. Ph:—43745 & 42705, (mill) 40854. Spindle—45,192. Looms – 1,177. Products bleached mulls, longcloth, shirting, sheeting Etc., Cloth width 28-68 in. Counts -14s, 16s, 30s, 36s, 40s. Spg. Mstr.—R. D. Merchant, Wvg. Mstr...J. Parker. Cotton consumed 5,729 Candies.

Edward Textiles Ltd., (The), Fergusson Road, Worli, Bombay, Mg. Agents—Puranmal Radhakishan

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BOMBAY ISLAND—*Cotton Mills (contd)*

& Co., Dougall Road, Ballard Estate, Fort, Bombay. Ph:—(office) 25300. (mill) 41820. Spindle—50,296. Looms—928. Products—leopards, dhoti, saree, longcloth, mull. Cloth width 31-47½ in. Counts—6s to 60s. Spg. Mstr.—E. Saldhana, Wvg. Mstr.—R. Meyer. Cotton consumed 9,641 Candies.

ELPHINSTONE SPG. & WVG. MILLS CO. LTD. (The) Elphinstone Road, Bombay. Mg. Agents—Chidambaram Mulraj & Co. Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay. Ph:—(office) 30967-8, (mill) 60451. Spindle- 43,740. Looms—887. **Products—Leather cloth in various grades and Colours, N. C. Book-Binding cloth, combined cloth (Rubberised) and Artificial Suedes and general textile goods** Cloth width 25-56 in Counts—4s to 60s. Spg. Mstr.—D R. Desai, Wvg. Mstr.—E. D. Musrie. Cotton consumed 7,365 Candies.

Finlay Mills Ltd. (The), 10-11, Govt. Gate Road, Parel, Bombay. Mg. Agents—James Finlay & Co. Ltd, Chartered Bank Bldg, Fort. Bombay. Ph:—(office) 26547-9, (mill) 41070. Spindle—46,072. Looms—784. Products—voil, saree, longcloth, dhoti, shirting Etc., Cloth width 28-64 in. Spg. Mstr.—N. K Aras. Wvg Mstrs—W. H. Howarth & J. K. Raje. Cotton consumed 5,109 Candies.

Gold Mohur Mills Ltd., (The), Main Road, Dadar, Bombay Mg Agents— James Finlay & Co. Ltd., Chartered Bank Bldg. Fort, Bombay. Ph :— (office) 26547-9, (mill) 60503 Spindle—40,540. Looms -1,020. Products—Grey—dhoti, saree, mull, longcloth Etc., bleached—fine dhoti, mull. Spg. Mstr.—M. M. Nadkarni, Wvg. Mstrs. C. Smith & A H. Joshi. Cotton consumed 4,896 Candies

Hind Mills Ltd., Carrol Road, Parel, Bombay. Mg. Agents—Hind Agents Ltd, Indu House, Dougall Road, Ballard Estate, Bombay. Ph :— (office) 30017 & 30018, (mill) 60443 Spindle -74,184. Looms— 1,227. Products—grey—mull, shirting, dhoti, saree, dobby crepe Etc., bleached—shirting, longcloth; dyed—poplin & shirting. Cloth width 27-64 in. Counts—13s to 60s. Spg. Mstr.—A. D. Mohani. Wvg Mstr.—R. R. Gawand Cotton consumed —12,122 Candies.

Hindoostan Spg .& Wvg. Mills Co. Ltd., (The), Ripon Road, Jacob Circle, Bombay. Mg. Agents—Thackersey Mooljee & Co., Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay: Ph :—20110, 22912 & 24985. (mill) 40810. Spindle—45,332. Looms—1,216. Products—dhoti, saree, longcloth, leopard, bed ticking, coloured sushies. dyed and printed crepes Cloth width 30-72 in. Counts...14s, 20s, 30s. Spg. Mstr—W. N. Fernandes, Wvg. Mstr. J. F Davar. Cotton consumed 7,818 Candies.

Hirjee Mills Ltd., (The), Fergusson Road, Lower Parel, Bombay. Mg. Agents—J. R. Bhadani & Co. Ltd, Office—Mill premises. Ph :—(mill) 40890. Spindle—48,012, Looms—884. Products—cotton piece goods, dhoti, Saree, shirting Etc. grey—shirting, coating, dhoti, longcloth Etc., Cloth width 27-72 in. Counts—13s to 80s. Wvg. Mstr.—R. W. D'silva. Cotton consumed 6,312 Candies.

India United Mills Ltd., (The), No. 1 Mill, Suparibag Road, Parel, Bombay. Mg. Agents—Agarwal & Co., Indu House, Dougall Road, Ballard Estate, Bombay. Ph :—26511 (10 lines), (mill) 60001 (5 lines). Spindles—96,760, Looms—2,228. Products—grey, shirting, sheeting, saree, chaddar Etc.; bleached—sheeting, shirting, longcloth, dyed-drill, printed—dress material, mull. Cloth width 25-86 in. Spg. Mstr.—S. J. Hallegua. Wvg. Mstr.-V. P. Kamat. Cotton consumed 15,987 Candies.

India United Mills Ltd., (The), Nos 2 & 3 Mills, Chinchpokly, Bombay. Mg. Agents—Agarwal & Co. Indu House, Dougall Road, Ballard Estate, Bombay. Ph :—(office) 26511 (10 lines). (mill) 45827-8 (2 lines). Spindles—1,12,330, Looms—1,494. Products—grey—dhoti, shriting, longcloth; bleached-shirting, longcloth ; printed-dress material, cotton waste yarns, 1s to 40s. Cloth width 26-54 in. Spg. Mstr... A. E. Ezekiel, Wvg. Mstrs.... V. N. Pednekar & L Panday. Cotton consumed 19,815 Candies.

India United Mills Ltd., (The), No 4 Mill, Chinchpokli, Bombay. Mg. Agents—Agarwal & Co., Indu House, Dougall Road, Ballard Estate. Bombay. Ph :—(office) 26511 (10 lines), (mill) 41813. Looms 1,872. Products—asian drill, sushi, belting, checks Etc. bleacheds—hirting, sheeting, longcloth,

BOMBAY ISLAND—*Cotton Mills* (*contd.*)

dhoti, drill etc., dyed-twill ; printed-crepe, dress material Etc., Wvg. Mstr.—A. V. R. Mudalier.

India United Mills Ltd, (The), No 5 Mill, Chinchpokli, Parel, Bombay. Mg. Agents—Agarwal & Co., Indu House, Dougall Road, Ballard Estate, Bombay. Ph :—(office) 26511 (10 lines), (mill) 40836. Spindles—28,940, Looms—684 Products—longcloth, mull (grey) : bleached—mull & longcloth. Cloth width 44-50 in. Spg. Mstr.—R. S. Pednekar. Wvg. Mstrs.—Salem K. Mordecai & Joseph Caustill. Cotton consumed—4,822 Candies.

India United Mills Ltd., (The)—Dye Works, Cadell Road Mahim. Bombay. Mg. Agents—Agarwal & Co., Indu House, Dougall Road, Ballard Estate, Bombay. Ph :—(office) 26511 (10 lines), (mill) 60061 (3 lines).

Indian Bleaching, Dyeing & Printing Works Ltd., (The) Prabhadevi Road, Dadar, Bombay. Mg Agents—Mafatlal Gagalbhai & Sons, 29, Rustom Bldg., Churchgate Street, Fort, Bombay. Ph : (office) 30069, (mill) 60650.

Indian Mfg. Co., Ltd., (The), Jacob Circle, Bombay. Mg. Agents—Damodher Thackersey Mooljee & Co., Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay. Ph :—(office) 20110, (mill) 40848. Spindles—49,580, Looms—1,119. Products—Calcutta saree, drill, longcloth Etc., grey—dhoti, saree, drill: bleached-drill, longcloth. Cloth width 24-58 in. Counts—12s to 40s. Spg. Mstr —A. J. Ghadially. Wvg. Mstr.—V. M. Meswani. Cotton consumed 7,432 Candies.

Jam Mfg. Co. Ltd., (The), No 1 Mill, Lalbaug, Bombay. Mg. Agents—Tricumdas Vandravan & Co, Office—mill premises. Ph :- (office) 41122, (mill) 40864, Spindles—30,940. Looms—910. Products—saree, dhoti, drill, handkerchief, longcloth Etc., Cloth width—32-66 in Counts—10s to 40s. Spg. Mstr:—C. P. Lovegrove, Wvg. Mstr.—K. J. Vyas. Cotton consumed—3,847 Candies.

Jam Mfg. Co. Ltd., (The), No 2 Mill, Sewree, Bombay. Mg. Agents—Tricumdas Vondravan & Co. Office—Jam Mills No 1. Lalbaug. Bombay. Ph :—(office) 41122, (mill) 60531. Spindles—23,176, Looms——574. Products—saree, drill, shirting Etc., Cloth width 28-58 in. Counts—14s, 16s, 19s, 24s, 32s, 36s, 40s. Spg. Mstr —K. B. Satam. Wvg. Mstr.—W. R. Deo. Cotton Consumed—1,786 Candies.

Jubliee Mills Ltd, (The), Sewree, Bombay. Mg. Agents—Chamanlal Mehta & Co. Ltd, Neptune Bldg., Apollo Street, Fort, Bombay. Ph :—(office) 25988, (mill) 40246. Spindle 38,280, Looms—680. Products—dhoti, sheeting, netting ; bleached—stripped shirting. Cloth width 23 54 in Counts—20s to 80s. Spg. Mstr—B. M. Aras. Wvg. Mstr.—C. G. Nanavati. Cotton consumed—4,167 Candies.

Kamala Mills Ltd., (The), Tulsi Pipe Road. Off Delisle Road, Bombay. Office—45-47, Apollo Street, Fort, Bombay. Ph : (office) 22048-9, (mill) 61510. Spindles—39,744, Looms—1,055. Products—longcloth, saree, dhoti, coating, shirting Etc.; bleached—coating, drill, crepe, shirting; grey—dhoti, saree, drill, rayon cloth ; dyed—crepe ; silk—georgette, satin, Jacquard ; rayon—crepe, oriental voile, shiozies Etc., Clothwidth 26-56 in. Counts—19s to 40s. Spg. Mstr.—K. G. Vaze, Wvg. Mstr.—Y. T. Mondkar. Cotton consumed—8,060 Candies.

Kathiawar Textile Mills (The), Suryodaya Mills Compound, Tardeo, Bombay. Mg .Partner—Shivlal Motichand Sheth ; office—58, Chhippi Chawl, Zaveri Bazar, Bombay. Ph :—32667. Looms——84. Products—satin, saree, shiozes, taffetas, chumki Etc , Cloth width 27-60 in. Wvg. Mstr.—I. M. Daftary.

Khatau Makanji Spg. & Wvg. Co. Ltd. (The), Haines Road, Byculla, Bombay. Mg. Agents—Khatau Makanji & Co. Ltd., Luxmi Bldgs., 2B, Ballard Pier, Bombay. Ph :—(office) 20093, (mill) 40867, Spindle—77,404, Looms—1,517, Products—bleached, dyed, printed and mercerised—dorias & voils ; bleached, dyed & printed—Sareer, dhoti, longcloth, mulmul etc. Cloth width—26—60 in. Spg. Mstr —N. V. Ullal, Wvg. Mstr.—B. T. Jagasia. Cotton consumed—6,220 Candies

Kohinoor Mills Co. Ltd., (The) No. 1 and 2, Naigaum Cross Road, Dadar. Bombay, Mg. Agents—Killick Industries Ltd., Killick Bldg., Home Street, Fort, Bomboy. Ph:—(office) 25127(mill)60074-5. Spindle--1,11,464, Loom—1,552.

BOMBAY ISLAND—*Cotton Mills (contd.)*

Products—grey—longcloth, dhoti, saree, drill, sheeting; bleached—longcloth, dhoti, sateen duck, poplin Etc; dyed—umbrella cloth, poplin, calico, canvas Etc., Cloth width 22-52 in. Spg. Mstrs.—E. G. Hurst & A. Fish, Wvg. Mstr—H. Bracewell. Cotton consumed—20,767 Candies.

Kohinoor Mills Co. Ltd., (The), No. 3 Mill, Lady Jamsetjee Road, Dadar, Bombay. Mg. Agents—Killick Industries Ltd., Home Street, Bombay. Ph :—(office) 25127, (mill) 60847. Products—curtain fabric, pyjama, silk cloth, taffetas, shark skin suiting, saree Etc., Wvg. Mstr—S. J Valladares. Looms—894.

Modern Mills Ltd., (The), No. 1 Mill, 98, Elphinstone Road, Bombay. Mg. Agents—N. Sirur & Co. Ltd, 70, Forbes Street, Fort, Bombay. Ph.—(office) Bombay 22947, (mill) 60186. Spindles 24,132. Spg. Mstr.—E. D. Mello.

Modern Mills Ltd., (The), No 2 Mill, Jacob Circle, Mahaluxmi, Bombay Mg. Agents—N. Sirur & Co. Ltd., 70, Forbes Street, Fort, Bombay. Ph :—(office) Bombay 22947, (mill) 40884. Spindles—19,944, Looms—644 Products—drill, dhoti, saree, longcloth, shirting Etc., Cloth width 26-55 in. Counts-14st o 44s. Wvg. Mstrs—P. V. Wagh & P. M. Rodrigues. Cotton Consumed 8,751 Candies. (Including Mill No. 1)

Moon Mills Ltd., (The) New Sewree Road, Sewree, Bombay. Agents—Asiatic Textile Co. Ltd., General Assurance Bldg., Hornby Road, Fort, Bombay. Ph :—(office) 28078, (mill) 60566. Looms—875. Products—Grey, bleached and dyed—leopards, shirting, drill, sushis, checks, Etc., Cloth width—26-60 in.

Morarjee Goculdas Spg. & Wvg. Co. Ltd., (The) Soparibaug Road, Parel, Bombay. Mg Agents—Piramal Gangadhar. Office—mill premises. Ph :—60021 (3lines). Spindles—60,652 Looms 1,650. Products—saree, crepe, poplin, shirting, dhoti, sheeting, towel Etc., Cloth width—26-75 in. Counts—8s to 80s. Spg. Mstr.—K. S. Mahal, Wvg. Mstr—V. R. Dravid. Cotton consumed 12,049 Candies.

New China Mills Ltd., (The), Sewree, Bombay. Mg. Director—Seth Navinchandra Mafatlal. Office—Rustom Bldg, 29, Veer Nariman Road, Fort, Bombay. Ph :—(office) 30068, (mill) 60680. Spindles—22,792, Looms—759. Products—poplin, coating, voil, doria, tussores, chintz, shirting Etc.; grey—dhoti, sadis, sushis, shirting; bleached—mull, poplin, voil, doria Etc.; dyed—poplin, voil; printed—chintz, doria, voil. Cloth width 26-56 in. Spg. Mstr.—P. J. Mahadevia, Wvg. Mstr—J. D. Seth. Cotton consumed—4,365 Candies.

New City of Bombay Mfg. Co. Ltd., (The), 63, Chinchpokli Road, Parel, Bombay. Mg. Agents—W. H. Brady & Co. Ltd., 12-14, Veer Nariman Road, Fort, Bombay. Ph :—(office) 25036, (mill) 40853. Spindles—45,944, Looms—432. Products—dhoti, saree, poplin Ect, Cloth width 36-44 in. Counts—10s to 60s. Spg Mstr.—B. S. Khambatta, Wvg. Mstr.—D. K. Shroff. Cotton consumed—5,551 Candies.

New Great Eastern Spg. & Wvg. Co. Ltd., (The), Victoria Garden Road, Bombay. Secy. & Agents—W. H. Brady & Co. Ltd., 12/14, Veer Nariman Road, Fort, Bombay. Ph :—(office) 25036, (mill) 40821. Spindles—46,884, Looms—1,018. Products—poplin, longcloth, Etc.; grey—longcloth; bleached—longcloth, poplin; dyed—twill, umbrella cloth. Cloth width 26-84 in. Counts—10s to 40s. Spg. Mstr—Dunjisha Sorabji Gandhi, Wvg. Mstr.—Rustomji Palonji Anklesaria. Cotton consumed—8,155 Candies.

New Kaiser-I-Hind Spg. & Wvg. Co. Ltd., (The), Gorupdeo Road, Chinchpokli, Bombay. Mg. Director—L. Kailashpat Singhania, J. K. Bldg., Dougall Road, Ballard Estate, Bombay. Ph.—(office) 32031, (mill) 40844. Spindles—54,052, Looms—1,262. Products—shirting, saree, mulmul, poplin Etc., Cloth width 24-58 in. Connts—14s to 50s. Spg. Mstr—R. K. Pavri, Wvg. Mstr.—G. D. Desai. Cotton consumed—8,052 Candies.

New Pralhad Mills Ltd., (The), Fergusson Road, Lower Parel, Bombay. Mg. Agents—Amrit Banaspati Co. Ltd., 55, Apollo Street, Fort, Bombay. Ph—(office) 34588, (mill)40164. Spindles—40,848, Looms—1,003. Products—all kind of fancy goods dyed—bleached, grey. Cloth width 25—72 in. Spg. Mstr—D. E. Kanga, Wvg. Mstr.—N. M. Mysorewalla. Cotton consumed 8,020 Candies.

New Union Mills Ltd, (The), Delisle Road, Parel, Bombay. Mg. Agents—Mafatlal Chandulal & Co. (Bombay) Ltd., Maneckji Wadia Bldg., 127, Ma-

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BOMBAY ISLAND—*Cotton Mills (cantd.)*

hatma Gandhi Road, Bombay. Ph:—(office) 26201—2, (mill) 40817. Spindles—33,720, Looms—873. Products—check shirting, mull, longcloth, dhoti, saree Etc., Cloth width 27—50 in. Counts—12s to 60s. Spg. Mstr—V. R. Pradhan, Wvg. Mstr.—B. C. Mehta. Cotton Consumed—8,968 Candies.

Phoenix Mills Ltd., (The), Tulsi pipe Line Road, Lower Parel, Bombay. Mg. Agents—Ramnarain Sons Ltd. Imperial Bank Bldg., Bank Street, Bomday. Ph:—(office) 30931 (3 lines), (mill) 45818/19 & 40832 Spindles—48,121, Looms—1,160. Products—sheeting, coating, drill, bed ticking, poplin, lint Etc. Cloth width 30—75 in. Counts—16s, 18s, 20s. 44s, 60s, 80s. Spg. Mstr—J. J. Randeri, Wvg. Mstr.—K. A. Desai. Cotton consumed—7,[illegible]49 Candies.

Podar Mills Ltd., (The), Delisle Road, Chinchpokli, Bombay. Mg. Agents—Podar Sons Ltd., Podar Chambers, Parsee Bazar Street, Fort, Bombay. Ph:—(office) 27065 (6 lines), (mill) 40149. Spindles—32,600, Looms—930. Products—drill, sheeting, shirting, dhoti Etc., Cloth width 22—54 in. Counts—8s to 44s. Spg. Mstr.—M. T. Singhi. Wvg. Mstr.—Govindji H. Patel. Cotton consumed—9,497 Candies.

Prakash Cotton Mills Ltd., (Previously known as Seksaria Cotton Mills Ltd., No 2.) Fergusson Road, Parel, Bombay. Mg. Agents—Seksaria Industries Ltd., Seksaria Chambers, 139, Medows Street, Fort. Bombay. Ph:—32928—30. Spindles—26,024 Looms—470. Products—shirting, drill, longcloth, sheeting Etc., Spg. Mstr.—R. K. Agarwal, Wvg. Mstr.—R. C. Mehta. Cotton consumed 6,588 Candies.

Raghuvanshi Mills Ltd., (The), 11—12, Haines Road, Mahaluxmi, Bombay. Mg. Agents—Ravindra Maganlal & Co. Ltd., Office—mill premises. Ph:—office & mill 40422. Spindles—33,160, Looms—156. Products—poplin, coating, shirting, drill, voil. Spg. Mstr.—D. T. Munim. Cotton consumed—8,444 Candies.

Ruby Mills Ltd., (The), Lady Jamsetjee Road, Dadar, Bombay. Mg. Agents—Chunilal Jeewandas & Co., 49—55, Apollo Street, Fort, Bombay. Ph:—(office) 22151, (mill) 60526. Spindles—19,464, Looms—430. Products—bleached—longcloth, dhoti, saree, print, shirting, drill. Cloth width 30—55 in. Counts—30s to 40s. Spg. Mstr.—George Gracious. Wvg. Mstr.—John Carvalho. Cotton consumed—2,435 Candies.

Sassoon Spg. & Wvg. Co. Ltd., (The), Mount Estate, Mazagaon, Bombay. Mg. Agents—M. G. Investment Corporation Ltd., Manekjee Wadia Bldg., 127, Mahatma Gandhi Road, Fort, Bombay. Ph:—(office) 26201—2, (mill) 40868. Spindles—60,240, Looms—1,254. Products—drill, grey sheeting, leopard, dobby cloth, fancy cloth, twill, sheeting, Cloth width 26—72 in. Spg. Mstr—M. F. Mistry. Wvg. Mstr.—H. Newton. Cotton consumed—16,395 Candies.

Seksaria Cotton Mills Ltd., Delisle Road, Bombay. Mg. Agents—Seksaria Sons Ltd., 139, Medows Street. Fort, Bombay. Ph:—(Office) 31021-3, (mill) 60824. Spindles—72,796, Looms—1,098. Products—grey, bleached, dyed, & mercerised—drill, dhoti, saree, shirting, longcloth Cloth width 28-60 in. Spg. Mstr.—G. V. Varkhedkar, Wvg. Mstr—R. J. Zaveri. Cotton Consumed—10,522 Candies.

Sree Madhav Mills Ltd., Foras Road Bombay. Mg. Agents—Purammal Radhakishan & Co., Office—Indu House, Dougall Road, Ballard Estate, Bombay. Ph:—41439. Spindles—39,112, Looms—838. Products—Longcloth, handkerchief, twill, grey sheeting, drill; bleached-longcloth, twill; dyed—poplin, drill, Cloth width 26-76 in. Spg. Mstr.—C. A. Master, Wvg. Mstr—N. G. Desai. Cotton consumed—5,370 Candies

Sree Madhusudan Mills (formerly Madhusudan Mills Ltd.,) Delisle Road, Bombay. Proprietors—Hall & Anderson dtd., Office—Janmabhoomi Chambers, Fort Street, Bombay. Spindles—61,400. Looms—1,742. Products—grey & coloured piece goods—heavy sheeting, longcloth, leopard, shirting, jap sheeting, drill, plain chaddar, sahtas, canvas cloth. Cloth width 28-88 in. Spg. Mstrs.—B. V. Mokashi & S. K. Davar, Wvg. Mstrs.—B. Kulkarani & B. G. Pathak. Cotton consumed—11,544 Candies.

Shree Niwas Cotton Mills Ltd., (The), Delisle Road, Lower Parel, Bombay. Mg. Agents—Marwar Textiles (Agency) Ltd, Shreeniwas House, Waudby Road, Fort, Bombay. Ph:—32048 & 32049 (Mills) 60045. Spindles—66,472, Looms—1,640. Products—grey—dhoti, sadis,

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BOMBAY ISLAND—*Cotton Mills* (*contd.*)

drill, leopard, sheeting Etc; bleached—sheeting, drill, voil, crepe, twill Etc.; printed—longcloth, shirting, poplin, voil Etc. Cloth width 26—54 in. Spg. Mstr—J. Y. Deshmukh, Wvg. Mstr.—T. Govinswamy. Cotton consumed—9,483 Candies.

Shree Ram Mills Ltd, (The), Fergusson Road, Lower Parel, Bombay. Mg. Agents—Bhogilal Menghraj & Co. Ltd., Fergusson Road, Parel, Bombay. Ph :—(office) 43014 (mill) 40029. Spindles —64,140, Looms—950. Products—fine counts and fancy goods—mull, cambric, voil, dhoti. Cloth width 26—56 in. Counts—40s to 120s. Spg. Mstr—I. D. Patol, Wvg. Mstr.—R. A. Golikeri. Cotton consumed 5,016 Candies.

Shree Sitaram Mills Ltd., Delisle Road, Bombay. Mg. Agents—More & Co. Ltd., 15/A, Elphinstone Circle, Fort, Bombay. Ph :—(office) 31066. (mill) 40117. Spindles—67,400, Looms—1,012. Products—grey & bleached—Sheeting, shirting, drill, saree, dyed poplin, shirting. Cloth width 29—56 in. Counts—60s to 85s. Spg. Mstrs.—S. P. Bhavnagri & G. R. Pradhan. Cotton consumed—7,781 Candies.

Simplex Mills Co. Ltd., (The), Clerk Road, Jacob Circle, Bombay. Mg. Agents—Forbes, Forbes, Campbell & Co. Ltd., Forbes Bldg., Home Street, Fort, Bombay. Ph—(office) 32981 (mill) 40617. Spindles—36,456, Looms—1,276. Products—cotton canvas and ducks, grey or bleached and dyed drill, flannelettes. Cloth width up to 72 in. Wvg. Mstr.—E. B. Patol. Cotton consumed—8,864 Candies.

Standard Mills Co. Ltd., (The) Parbhadevi Road, Bombay. Mg. Agents—Mafatlal Gagalbhai & Sons, 29, Veer Nariman Road, Fort, Bombay. Ph—(office) 30069, (mill) 60589. Spindles—53,892, Looms—1,633 Products—grey—chaddear, longcloth; bleached—chaddar, dhoti, shirting, saree, drill, twill; dyed—towel, dhoti, shirting, saree; printed—longcloth, voil, crepe. Wvg. Mstr.—V. A. Ajagoankar. Cotton consumed—6,422 Candies.

Svadeshi Mills Co. Ltd., (The), Kurla (Bombay Suburban District). Mg. Agents—Tata Indusries Ltd., Bombay House, 24, Bruce Street, Fort, Bombay. Ph :—(Office) Bombay 26041. Ext. 69. (mill) 87019. Spindles—65,040, Looms 2,000. Products—grey—dhoti saree, sheeting; bleached—coloured shirting, check, longcloth, sheeting, drill, mull. Etc.; dyed—poplin, curtain cloth; printed—poplin, cellular, longcloth. Cloth width 25 90 in. Spg. Mstr.—H. Pesina, Wvg. Mstr.—A. S. Parasuram. Cotton Consumed—10,729 Candies.

Swan Mills Ltd., Sewree, Bombay. Mg. Agents—James Finlay & Co. Ltd., Chartered Bank Building, Fort, Bombay. Ph :—(office) 26547 (3 Lines), (mill) 60434. Spindles—35,804, Looms—552. Products—mull, dhoti, cambric, voil, madapalam—grey, bleached & dyed. Cloth width 30-60 in. Counts—60s to 100s. Spg. Mstr.—M. H. Bhatt, Wvg. Mstr.—H. D. Gamadia. Cotton consumed—6,850 Candies.

Tata Mills Ltd., (The), Dadar Road, Parel, Bombay. Mg. Agents—Tata Industries Ltd., Bombay House, Bruce Street, Fort, Bombay. Ph :—(office) 26041--26050, (mill) 60378. Spindles 63,248, Looms—1,800. Products—grey, bleached & dyed shirting, longcloth, drill, twill, napkin, poplin Etc., Cloth width 26-84 in. Counts—10s, 12s, 14s, 18s, 21s, 36s, 40s. Spg. Mstr—R. S. Pastakia, Cotton consumed 12,530 Candies.

Universal Textiles Ltd., 156A, Tardeo Road, Bombay. Proprietors—Dagdulal Dhanrup, S. S. Patil, K. Rajagopal, R. K. Kamble. Office—Mill premises. Ph:—43345. Spindles—368, Looms—182. Products—grey mulmul, voil, coloured saree. Cloth width 44-52 in.

Victoria Mills Ltd., (The), DeLisle Road, Parel, Bombay. Mg. Agents—Mangaldas Mehta & Co. Ltd. Neptune Bldg., Apollo Street, Fort, Bombay. Ph :—(office) 25988, (mill) 60315. Spindles—50,152. Looms—958. Products—drill, mull, dhoti, sheeting, bed ticking, gadlapat, desuties, longcloth, poplin Etc., Cloth width 24-56 in. Counts—18s to 35s warp, & 40s weft. Wvg. Mstr.—M. A. Gagrat. Cotton consumed 6,956 Candies.

Western India Spg. & Mfg. Co. Ltd., (The), Kalachowki Road, Bombay. Mg. Agents—Thackersey Mooljee Sons & Co., Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay. Ph :—(office) 20110, (mill) 40813. Spindles—45,508, Looms—1,308. Products—drill, leopard, longcloth, dhoti, saree, dosuties Etc.; Bleached—celluler shirting, chaddar, longcloth, drill Etc.; dyed—sushis, and drill. Cloth width 26-89 in. Counts—11s to 40s. Spg. Mstr.—D. T. Udeshi, Wvg. Mstrs.—A. V. Tonk & R. F. Bardy. Cotton consumed 8,423 Candies.

BOMBAY PRESIDENCY

Abdul Samad Haji Lal Muhammad Wvg. Factory, Bhiwandi, Thana District. Proprietor—Khan Saheb Abdul Samad Haji Lal Md., Office—mill premises. Looms—246.

Ahmedabad Advance Mills Ltd., (The), Outside Delhi Gate, Ahmedabad. Mg. Agents—Tata Industries Ltd., Bombay House, 24, Bruce Street, Fort, Bombay. Ph.—(office) Bombay 26041, (mill) 2069. Spindlos—44, 224. Looms—1,016. Products—grey, bleached & dyed—chaddar, coating, dhoti, drill, handkerchief, mull, poplin, saree, serviette, shirting Etc., Cloth width 24—60 in. Spg. Mstr.—D. D. Pastakia. Wvg. Mstr. A. J. Gandhi. Cotton consumed 8,476 Candies.

Ahmedabad Cotton Mfg. Co. Ltd., (The), Outside Sarangpur Gate, Ahmedabad. Mg. Agents—Amritlal Hargovandas & Bros. Ltd., Office—mill premises. Ph:—Ahmedabad 5181. Spindles—22,900, Looms—509. Products—longcloth, saree, sushis, mattoe, netting Etc., grey—saree, dhoti, longcloth, mull, takas, Voil: bleached—saree, dhoti, longcloth, poplin, shirting, mull, voil Etc., Cloth width 24—56 in. Spg. Mstr.—P. M. Banker, Wvg. Mstr.—F. D. Patel. Cotton consumed 2,734 Candies.

Ahmedabad Jaya Bharat Cotton Mills Ltd., (The) Mithipur, Ahmedabad. Mg. Agents Parakh Fabrics Ltd., 28, Apollo Street, Fort, Bombay. Ph:- Ahmedabad 5333. Spindles—35,824. Looms—686. Products-Egyptian cotton stripped shirting, poplin, saree, dhoti, voil, linen, handkerchief, twill. Cloth width 29—58 in. Counts—medium and fine up to 90s. Spg. Mstr.—Natverlal M. Choksi, Wvg. Mstr. —K. L. Phalnikar. Cotton consumed 3,841 Candies.

Ahmedabad Jupiter Spg. Wvg. & Mfg. Co. Ltd., (The), Dudheswar Road, Ahmedabad. Mg. Agents- M. Parakh & Co. Ltd., 28, Apollo St., Fort, Bombay. Ph:—Ahmedabad 2804 5. Spindles—29,508. Looms—667. Products—bleached—dhoti, handkerchief, doria, mull, shirting; dyed mercerised leno shirting. Spg. Mstr.—Nemchand J. Parekh. Wvg. Mstr.—A. C. Bataram. Cotton consumed 3,900 Candies.

Ahmedabad Kaiser-I-Hind Mills Co. Ltd., (The), Outside Raipur Gate, Ahmedabad. Mg. Agents—Ramanlal Kanaiyalal & Co. Ltd., Office—mill premises. Ph:—Ahmodabad 5152. Spindlos—20,392. Looms—432. Products—Grey, bleached, dyed—chaddar, dhoti, saree, sushis, takas, longcloth, poplin, crepe, mull, napkin, turkish, shirting, towel, drill, bedticking Etc., Cloth width 25—65 in. Counts—20s/30s & 40s 60s. Spg. Mstr.—B. P. Dave. Wvg Mstr.—K. D. Bhatt. Cotton consumed—3,615 Candies.

Ahmedabad Laxmi Cotton Mills Co. Ltd., (The), Outside Raipur Gate, Ahmedabad. Mg. Agents—Hariprasad Jayantilal & Co. Ltd., Office—mill premises. Ph:—(mill) 5125. Spindles—26,924, Looms—592. Products—saree, dhoti, shirting, sushis, poplin, chaddar, mosquito, twill, mull Etc., Cloth width 25—60 in. Counts—18s, 36s, 40s, 3/18s Spg. Mstr.—C. V. Desai. Wvg. Mstr.—M. M. Shah. Cotton consumed 5,761 Candies.

Ahmedabad Mfg. & Calico Printing Co. Ltd., (The). (Jubilee Mills), Outside Dariapur Gate, Ahmedabad. Mg. Agents—Karamchand Premchand Ltd., Ph.—2888 (2 lines). Spindles—43,856. Looms—881. Products—blanket, dhoti, Longcloth, drill, twill, saree, towel, print, lint Etc., Cloth width 36—50 in. Counts—1s to 60s Spg. Mstr.—W. H. Date, Wvg. Mstr.—T. M. Desai.

Ahmedabad Mfg. & Calico Printing Co. Ltd., (The Calico mills), Outside Jamalpur Gate, Ahmedabad. Mg. Agents—Karamchand Premchand Ltd., Ph.—Ahmedabad 5001 (4 lines). Spindles—1,04,676. Looms—1,568. Products—dhoti, poplin, saree, mull, handkerchief, chintz, shirting Etc., Cloth width 36—90 in. Counts—20s to 120s. Spg. Mstr. —K. B. Dhurba. Wvg. Mstr.—P. S. Trivedi. Cotton consumed 15,061 Candies. (Including Jubilee Mills)

Ahmedabad New Cotton Mills Co. Ltd., near Khokhra, Mehemdabad, Ahmedabad. Mg. Agents—Narrottam Chandulal & Co. Ltd., Office—mill premises. Ph.—Ahmedabad 5215. Spindles—20,116, Looms—448. Products—dhoti, saree, mull poplin, shirting, muslin, longcloth, doria, twill, Etc., Cloth width 36—66 in. Counts—up to 80s. Spg. Mstr.—Hamlet Wilson, Wvg. Mstr.—J. M. Shah. Cotton consumed 3,720 Candies.

BOMBAY PRESIDENCY—*Cotton Mills (contd)*

Ahmedabad New Textile Mills Co. Ltd., (The), outside Raipur Gate, Ahmedabad. Mg. Agents—Naraanlal Jivanlal & Co., Office—Mill premisas. Ph :—Ahmedabad 5053-4. Spindles—29,508, Looms—902. Products—dhoti, saree, longcloth, printed voil, shirting Etc., Cloth width 22-56 in. Spg. Mstr.—H. J. Mistry, Wvg. Mstr.—E. Guest. Cotton consumed 1,151 Candies.

Ahmedabad Sarangpur Mills Co. Ltd., (The), Outside Raipur Gate, Ahmedabad. Mg. Agents—Himatlal Motilal & Co. Ltd., Office—mill premises. Ph :—Ahmedabad 5138. Spindles—30,928, Looms—590. Products—grey & bleached—dhoti, shirting, saree. Jean, poplin, bedsheet, gauze, crepe, susis, shirting, longcloth, towel Etc., Cloth width 25-58 in. Counts—16s/60s. Spg. Mstr.—Anandlal Maneklal Shah, Wvg. Mstr.—Pandya Bipinchandra Rao. Cotton consumed- 4,144 Candies.

Ahmedabad Shri Ramkrishna Mills Co. Ltd., (The). Gomtipur Road, Ahmedabad. Mg. Agent - Chimanlal Maneklal & Co. Office—mill premises. Spindles—28,672, Looms—502. Products—fancy saree of cotton with artificial silk borders, shirting. longcloth, mull, voil Etc., Counts -58s/78s (combed). Spg. Mstr.—P. M. Banker, Wvg. Mstr.—C. Kanaiyalal. Cotton consumed 2, 342 Candies.

Ajit Mills Ltd., (The). Rakhial Road, Ahmedabad. Mg. Agents—Chinubhai Natanbhai & Co. Ltd., Office—mill premises. Ph :—(office and mill) Ahmedabad 5137. Spindles—23,868. Looms—513 Products—bleached—poplin, pyjama cloth, crepe, coating, saree, mull, coslin ; dyed—poplin, saree, coating ; printed—voil, mull. Cloth width 32-62 in. Counts—18s, 20s, 30s, 35s, 40s, 45s, 50s, 60s, 80s. Spg. Mstr.—J. N. Shah, Wvg. Mstr. J. J. Daruwala. Cotton consumed 4,221 Candies.

Ambica Mills Ltd., (Shri). No 1, Kankaria Loco Siding, Ahmedabad. Mg. Agents—Harivallabhdas Kalidas & Co. Office—mill premises. P. B. No. 112. Ahmedabad. Ph :—(office & mill) Ahmedabad 5208. Spindles—33,772, Looms—480. Products—coating, mull, poplin, shirting, saree, dhoti. Spg. Mstr.—D. A. Gidvani. Wvg. Mstr.—C. P. Vaidya.

Ambica Mills Ltd., (Shri), No 2. Ahmedabad. Mg. Agents—Harivallabhdas Kalidas & Co. Kankaria Road, near Susker Lake, Ahmedabad. Ph :—(office & mill) 5174. Spindles—43,028. Looms—903. Products—poplin, coating, dhoti, mull, longcloth. Spg. Mstr.—J. C. Mehta, Wvg Mstrs.—E. R. Balam & K. A. Thakar. Cotton consumed—6,005 Candies. (Including Mill No. 1)

Ananta Mills Ltd., (The). Rakhial Road, Ahmedabad. Mg. Agents—Jayantilal Amratlal Ltd., Office—mill premises. Ph :—Ahmedabad 5354. Spindles—19,208, Looms—450. Products—dhoti, saree, shirting. Counts—20s to 40s. Spg. Mstr—G. P. Chatterjee. Wvg. Mstr.—M. D. Soni. Cotton consumed 4,799 Candies.

Aruna Mills Ltd., (The), Naroda Road, Ahmedabad. Mg. Agents—P. M. Hutheesing & sons Ltd., Office—mill premises. Ph :—Ahmedabad 2886-7. Spindles—39,964. Looms—912. Products—grey—dhoti, saree, mull, takas, doria, chaddar ; dyed—poplin, shirting, chaddar. Counts—20s to 90s. Spg. Mstr.—B. B. Mitra, Wvg. Mstr.—V. M. Despande. Cotton consumed 5,007 Candies.

Arvind Mills Ltd., (The), Naroda Road, Ahmedabad. Mg. Agents—Narottam Lalbhai & Co. Office—mill premises. Ph :—Ahmedabad 2884-5. Spindles—62,448. Looms—1,216. Products—dhoti, crepe, lawn, mull, nainsbook, shadow poplin, saree, shirting, twill, voil. Cloth width 26-56 in. Counts—20s/120s. Spg. Mstr.—H. Wilson, Wvg. Mstr.—D. V. Tulpule. Cotton consumed—7,171 Candies.

Aryodaya Ginning & Mfg. Co. Ltd., (The), Asarva Road, Railwaypura Post, Ahmedabad. Mg. Agents—Mangaldas & Brother Ltd., Office—mill premises. Ph :—(office & mill) Ahmedabad 2115 & 2764. Spindles—35,884, Looms—884. Products—longcloth, saree, mull, dhoti, crepe, shirting, mosquito netting Etc., Cloth width 28-60 in. Counts—18s, 36s, 44s, 60s. Spg. Mstr.—F. Ashton, Wvg. Mstr.—Ranchhodlal M. Shah. Cotton consumed 5,869 Candies.

Aryodaya Spg. & Wvg. Co. Ltd., Asarva Road, Ahmedabad. Mg. Agents—Mangaldas & Balabhai & Co. Office—Asarva Road, P. O. Box. No. 146, Railwaypura Post, Ahmedabad. Ph :—2015 & 3412. Spindles—52,788, Looms—968. Products—longcloth, mercerised mull, voil, poplin, shirting, dhoti, saree. Cloth width 26-56 in. Spg. Mstr—Baldvedas R. Shah, Wvg. Mstr.—K. G. Kantharia. Cotton consumed 5,800 Candies.

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BOMBAY PRESIDEFCY—*Cotton Mills* (*contd.*)

Asarwa Mills Ltd., (The), Asarwa Road, Asarwa P. O., Ahmedabad. Agents—Chhotabhai Patel & Co. Ltd., Ph :--(mill) Ahmedabad 2121. Spindles 27,904, Looms—594. Products—grey & bleached—dhoti, saree, longcloth, mull, poplin, drill, lenos, napkin, chaddar, handkerchief sushis Etc ; dyed—rayon saree, poplin, sushis, doria. Cloth width 28-58 in. Spg. Mstr.—P. G. Shah, Wvg. Mstr.—C. M. Mehta. Cotton consumed 4,160 Candies.

Asarwa Mills Ltd., No. 2 (formerly Shrinagar Mills Ltd.,) near Kalupur Overbridge, Railwaypura Post, Ahmedabad. Mg. Agents—Chhotabhai Patel & Co. Ltd., Head office- Bombay. Ph :—Bombay 32078-79, (mill) Ahmedabad 2329. Spindles—18,460, Looms—436. Products—cotton chaddar, longcloth, dhoti, saree, takas, naksis. Spg. Mstr.—P. G. Shah, Wvg. Mstr.—R. H. Shah. Cotton consumed 3,406 Candies.

Asoka Mills Ltd., (The), Naroda Road, Ahmedabad. Mg. Agents—Lalbhai Dalpatbhai & Co.. Office—mill premises. Ph :—Ahmedabad 2801. Spindles—37,368, Looms—912. Products—bleached—crepe, doria, dhoti, longcloth, shirting ; dyed—poplin. Spg. Mstr.—D. C. Commissariat, Wvg. Mstr.—H. P. Patel. Cotton Consumed 7,398 Candies.

Baroda Spg. & Wvg. Co. Ltd., (The), (mill No. 1), Pani Gate, Baroda. Mg. Agents—Javerchand Laxmichand & Co. Ph :—2443. Spindles—16,876, Looms—344. Products—grey—chaddar, towel, takas, saree, dhoti, shirting, napkin ; bleached—longcloth, saree, dhoti, napkin ; dyed—poplin ; printed—chintz, bedsheet Etc., Cloth width 24-72 in. Counts—18s, 24s, 30s, 40s, 44s, 64s. Spg. Mstr.—Vishnu G. Dalvi, Wvg. Mstr.—Dolatrai N. Desai.

Baroda Spg. & Wvg. Co. Ltd., (The), (Mill No 2), Pani Gate. Nr. Bhadra, Baroda. Mg. Agents—Javerchand Laxmichand & Co., Ph :—2443. Spindles—13,500, Looms—320. Products—grey—takas, saree, dhoti, shirting, towel, napkin ; bleached—longcloth, coating, mull; dyed—poplin ; printed—chintz, bedsheet. Cloth width 24-72 in. Counts—18s, 24s, 30s, 40s, 44s, 64s, Spg. Mstr.—V. G. Dalvi, Wvg. Mstr.—D. N. Desai. Cotton consumed 4, 761 Candies. (Including No. 1 Mill)

Barsi Spg. & Wvg. Mills Ltd., (The), Barsi Town (Sholapur Dist.). Mg. Agents—Desai Sons & Co , 104, Apollo Street, Fort, Bombay. Ph :—24768. Spindles—11,380, Looms—280. Products—coating, sheeting, dhoti ; grey—longcloth, sheeting, shirting, dhoti ; bleached—longcloth, dhoti, sheeting, saree Etc., Cloth width 24-52 in. Counts—14s to 24s. Spg. Mstr.—G. D. Shejwalkar, Wvg Mstr.—J. M. Wagle. Cotton consumed 3,691 Candies

Bechardas Spg. & Wvg. Mills Co. Ltd., Rakhial, Ahmedabad. Mg. Agents—Durgaprasad S. Laskari & Co. Ltd., Office—mill premises. Ph :—2010. Spindles—19,320, Looms—468. Products—saree, mull, longcloth, printed chintz, shirting ; grey—longcloth ; bleached—sushis, mull, saree, chaddar Etc., Cloth width 26 66 in. Spg. Mstr.—Horsanji Mistry, Wvg. Mstr.—Y. M. Pitale Cotton consumed 3,648 Candies.

Bhalakia Mills Co Ltd., (The), Kankaria Road, Ahmedabad. Mg. Agents—Chandulal & Co. Ltd., Office—mill premises. (P. O. Box No 29). Ph :—(office & Mill) Ahmedabad 5277. Spindles—18,580, Looms—400. Products—chaddar, saree, dhoti, cellulars, longcloth, matty, mosquito netting, shirting Etc ; grey—saree, shirting, takas, dhoti ; bleached—dhoti, matty, poplin, shirting ; printed—chintz. Cloth width 26-56 in. Counts—18s, 24s, 36s, 42s. Spg. Mstr.—R. R. Sapre, Wvg. Mstr.—U. K. Tripathi. Cotton consumed 3,381 Candies.

Bharat Spg. & Wvg. Co. Ltd., (The), No 1. Mill, Hubli. Mg. Agents - Purshotom Govindjee & Co., "Gool Mansion" Homji Street, Fort, Bombay. Ph :—(office) Bombay 20163. Spindles—2,700 Products—bleached—dhoti, bedsheet, drill, longcloth, twill, shirting;dyed—drill, Coating. Cloth width 36 76 in. Spg. Mstr.—G. K. Dave, Wvg. Mstr.—P. H. Javeri.

Bharat Spg. & Wvg. Co. Ltd., (The), No 2. Mill, Hubli. Mg. Agents—Purshotam Govindjee & Co. 'Gool Mansion" Homji Street, Fort, Bombay. Ph :—20163. Spindles—26,204, Looms—604. Products—grey & dyed—bedsheet, coating, dhoti, drill, longcloth Etc , Cloth width 36-76 in. Counts—6½s to 30s., Spg. Mstr.—G. K. Dave, Wvg. Mstr.—P. H. Javeri. Cotton consumed 4,038 Candies. (Including No. 1 Mills)

Bharat Suryodaya Mills Co. Ltd.. (The), Kankaria Road, Ahmedabad. Mg. Agents—K. M. Chaturbhuj das & Co., Office—mill premises. Ph :— (Office & mill) 5251. Spindles—13,928, Looms 412. Products—dhoti, longcloth, mull, poplin, sushis twill, voil, shirting, chaddar Etc., Cloth width

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BOMBAY PRESIDENCY—*Cotton Mills (contd.)*

26—60 in. Counts—20s, 30s, 40s. Spg. Mstr.—Chandulal B. Joshi, Wvg. Mstr.—Blavantrai D. Desai. Cotton consumed 1,495 Candies.

Bharat Vijaya Mills Ltd., (The), Kalol (N. Gujrat) Baroda State. Mg. Agents—Ramanlal Champaklal & Co., Office—mill premises. Ph :— (office & mill). 64. Spindles—16,824, Looms—320. Products—coloured shirting, saree. poplin, crepe, dhoti, longcloth, doria Etc., Cloth width 30—56 in. Counts—13s to 50s. Spg. Mstr.—C. B. Mashruwala, Wvg. Mstr.—N. B. Desai. Cotton consumed 2,299 Candies.

Bharatkhand Textile Mfg. Co. Ltd., (The).(No 1 & 2Mills) Camp Road, Ahmedabad. Mg. Agents—Jivanlal Girdharlal & Co. Ltd., Office—mill premises. Ph :—Ahmedabad 2059. Spindles-31,720,Looms—914 Products—dhoti, saree, sushis, voil, poplin, longcloth, mull, doria. Cloth width 30—56 in. Counts—20s, 30s, 40s, 60s, warp and 30s, 60s, & 80s weft. Spg. Mstr.—Dinsha D. Mirza Wvg. Mstr.—Manubhai K Hinglokwala. Cotton consumed 3,825 Candies.

Bihari Mills Ltd., (The), Mithipur, Khokhra, Mahomdabad, P B No. 4, Ahmedabad. Agents—Motilal, Harilal & Co. Ltd.. Office mill premises. Ph:—(office) Ahmedabad 5520. Spindles—18,240, Looms 440. Products—grey—takas,dhoti,bleached—takas, poplin, crepe, longcloth, twill, mull ; dyed—dhoti; chokada ; voil; printed—poplin, mull, voil. Cloth width 26—54 in. Counts—medium—18s to 24s, fine—36s to 58s. Spg. Mstr.—Ambalal K. Patel. Wvg. Mstr.—Cawasji D. Mehta. Cotton consumed 3,522 Candies.

Broach Fine Counts Spg. & Wvg. Co. Ltd, (The), Station Road, Broach. Mg. Agents—Brijlal Bilasrai & Co. Office—mill premises. Ph:—(mill) Broach 63. Spindles—28,848. Looms—542. Products—mulmul, longcloth, dhoti, saree Etc., Cloth width 28—60 in. Counts—40s and above. Not working from 1st April, 49.

Chalisgaon Shri Laxmi Narayan Mills Co. Ltd., (The), Chalisgaon, East Khandesh. Mg. Agents—Narayan Bankat. Office—mill premises. Spindles—22,636. Looms—604. Products—grey—dhoti, drill, sheeting,longcloth;bleached—dhoti, longcloth; dyed—gadlapat. Cloth width 31—54 in. Counts—16s, 18s. warp, 18s weft. Spg. Mstr.—S. W. Jakhade, Wvg. Mstr.—G. D. Natu. Cotton consumed 3,907 Candies.

Chhotalal Mills Ltd, (The), Kalol, North Gujrat. Mg. Agents—Chhotalal Hirachand & Co. Ltd., Office—mill premises. Ph—(office & mill) Kalol 69. Spindles—19,472, Looms—456. Products—grey, bleached, dyed & printed—longcloth, dhoti, saree, mull, shirting, sushis, voil, chintz Etc., Cloth width 32-60 in. Counts—18s/24s, 36s/40s, 44s/58s. Spg. Mstr.—N. M. Rawal. Wvg. Mstr.—D. M. Padhya. Cotton consumed 5,686 Candies.

City of Ahmedabad Spg. & Mfg. Co. Ltd, (The), Kankaria Road, Ahmedabad. Mg. Agents—Chamanlal Mangaldas & Sons. Office—mill premises. Ph:—(office & mill) 5237. Spindles—26,202. Looms—367. Products—grey & bleached—takas, dhoti, saree Etc., Counts—19s to 24s. Spg. Mstr.—Mahesh S. Mehta. Wvg. Mstr.—Jamnadas D. Mody. Cotton consumed 835 Candies.

Commercial Ahmedabad Mills Co. Ltd., (The), outside Prem Gate, Ahmedabad. Mg. Agents—Dhanjibhai & Tricumlal & Co. Ltd., Office—mill premises. Spindles—30,264. Looms—620. Products—sushis, dobby shirting, saree, mull, dhoti, voil, crepe, mercerised voile, poplin Etc., Counts—26s, 30s, 35s, 40s, 50s, 60s, 70s, 90s. Spg. Mstr.—Natverlal H. Talati. Wvg. Mstr.—K. S. Ramrao. Cotton consumed 4,315 Candies.

Fine Knitting Co. Ltd., (The), Near Chamunda Mata, Asarwa Road, Ahmedabad. Mg. Agents—H. Keshavlal & Co. Office—Naroda Road, Ahmedabad. Ph:—(office & Mill) 2279. Spindles—9,000. Counts—10s to 20½s. Spg. Mstr.—Ramanlal Maganlal Desai. Cotton consumed 1,224 candies.

Gaekwar Mills Ltd., (The), Billimora, Navsari District. Mg. Agents—H. M. Mehta & Co. Ltd., Office—mill premises. Ph:—Billimora 461. Spindles—28,692, Looms—662. Products—dhoti, p'in, saree, shirting, mull. Cloth width 28-56 in. Counts—40s to 80s. Spg. Mstr.—D. D. Suratia. Wvg. Mstrs.—H. D. Gabba & B. P. Desai. Cotton consumed 3,797 Candies.

Gendalal Mills Ltd., (The), Jalgaon, East Khandesh. Mg. Director—Surajmal Gendalal Badjatia. Office—mill premises. Ph:—(office & mill) Bhusawal 35. Spindles—13,848, Looms—370. Products—bleached-longcloth, drill, coating, shirting,bedsheet, bed ticking, towel, twill, mulmul, saree, dhoti.

BOMBAY PRESIDENCY—*Cotton Mills (contd)*

Cloth width 20—57 in. Counts—14s to 20s warp & 10s, 14s, & 24s weft. Wvg. Mstr.—D. Nima. Cotton consumed 3,704 Candies.

Girdhardas Harivallavdas Mills Ltd., Near Idga Gate, Ahmedabad. Mg. Agents—Chamanlal Mangaldas & Co. Ph:—(office) 2028. (mill) 2591. Spindles—21,808. Counts—30s to 60s. Spg. Mstr.—R. P. Parikh. Cotton consumed 2,418 Candies.

Gokak Mills Ltd., (The), Gokak Falls, Belgaum Dist., S. M. C. Mg. Agents—Forbes, Forbes. Campbell & Co Ltd., Forbes Bldg., Home Street, Fort, Bombay. Spindles—73,248, Looms—2. Spg Mstrs.—R. Fletcher & S. Potts. Cotton consumed 10,507 Candies.

Gopal Mills Co. Ltd., (The), Mahatma Gandhi Road, Broach. Agents—Nanddas Haridas & Co. C/o. The Vijaya Mills Co. Ltd., Naroda Road, Ahmedabad. Ph:—(office) Ahmedabad 2896, (mill) Broach 31. Spindles—21,748, Looms—652. Products—grey, bleached & dyed-dhoti, twill,saree, longcloth, mulmul, napkin, sushis, shirting, drill, poplin Etc., Cloth width 28—64 in. Counts—single cotton yarns 18s to 24s and 30s to 42s. Spg. Mstr.—C. H. Shelat. Wvg. Mstr.—K. H. Shah. Cotton consumed 4,450 Candies.

Gujarat Cotton Mills Co. Ltd., (The), Naroda Road. Ahmedabad. Mg. Agents—Chatturam & Sons. Office—mill premises. Ph.- Ahmedabad 2019. Spindles—31,258, Looms—606. Products dhoti, saree, longcloth ; grey—shirting, sushis, poplin, chintz; printed—dhoti,saree, chintz. Cloth width 26—60 in. Counts—16s to 40s. Spg. Mstr.—N. D. Mehta, Wvg. Mstr. -J. A. Ganguli. Cotton consumed 2,074 Candies.

Gujarat Ginning & Mfg. Co. Ltd., Outside Prem Gate, Ahmedabad. Mg. Agents—Jamnabhai Mansukhbhai. Office—mill premises. Spindles—25,232, Looms—644. (Not working Since 20. 3. 46)

Gujarat Hosiery Factory., (The), Rakhial Road, Ahmedabad. Proprietors—C. C. Dalal & Co., Office—mill premises. Ph:—Ahmedabad 5353. Spindles—10,620. Counts—14s to 60s, 2/10s to 2/60s. Spg. Mstr.—A. K. Patel. Cotton consumed 976 Candies.

Gujarat Spg. & Wvg. Co. Ltd., (The), Outside Kalupur Gate, Railwaypura Post, Ahmedabad. Mg. Agents—Jumnabhai Mansukhbhai & Co., Office—mill premises. Ph :—Ahmedabad 2083. Spindles—28,792, Looms—672. Spg. Mstr.—K. D. Doctor, Wvg. Mstr.—Kantilal Manilal Shah. Cotton consumed 6,286 Candies.

Harivallabhdas Mulchand Mills Co Ltd., (The), Out Dariapur Gate, P. O. Railwaypura, Ahmedabad. Mg. Agents—Girdharlal Harilal & Co Ltd., Office—mill premises. Ph :—Ahmedabad 2093 & 3201. Spindles—18,400, Looms—430. Products—grey—longcloth , bleached—mull, longcloth ; dyed—poplin, chintz, voil. Cloth width 30-60 in. Counts—19s 36s warb. Spg. Mstr.—B. B. Shah, Wvg. Mstr —Kiryu (Japan). Cotton consumed 3,391 Candies.

Hathising Mfg. Co. Ltd., (The), outside Saraspur Gate, Ahmedabad. Mg. Agents—Maneklal Mansukhbhai & Co., Office—mill premises. Ph :—Ahmedabad 2046. Spindles—13,120 Counts—20s, Spg. Mstr.—Ratan'al Rangildas Dalal. Cotton consumed 1,085 Candies.

Himabhai Mfg. Co. Ltd., (The), nr. Saraspur Gate, Railwaypura Post, Ahmedabad. Mg. Agents - Dhirajlal Khushaldas & Bros. Office—mill premises. Ph :—Ahmedabad 2076. Spindles—17,560. Looms—436. Products - dhoti, poplin, saree, shirting, voile. Cloth width 26-52 in. Counts—African and Egyptian 40s to 60s and above. Wvg. Mstr.—Ahmedbhai Bhikhanbhai Sayed. Cotton consumed 2,036 Candies.

Jam Shri Ranjitsinghji Spg. & Wvg. Mills Co. Ltd., (The), Sholapur. Mg. Agents Lalji Naranji & Co. Office—11, Bank Street, Fort, Bombay. Ph :—(office) Bombay 20596, (mill)Sholapur 19 & 181. Spindles—20,820, Looms—511. Products—grey—coating, longcloth, dosuties, drill, dhoti, saree ; bleached—domestic and mull ; dyed—check, mazri, coating, saree, sushis. Cloth width 28-55 in. Counts—singles 1½s to 40s grey. Spg. Mstr —M. K. Yardi, Wvg. Mstr.—K. Sarvesam. Cotton consumed 3,440 Candies.

Janak Ltd., (Prabha Mills) Viramgam, Bombay. Receivers—Sanjiban Banerji & M. D. Mehta, 59, Forbes Street, Fort, Bombay, Ph :—Bombay 33825. Spindles—23,688, Looms—558. Products—shirting, mull, longcloth, saree, dhoti, sheeting, Etc , Cloth width 36-54 in. Spg. Mstr —A. K. Guha. Cotton consumed 2,750 Candies.

BOMBAY PRESIDENCY—*Cotton Mills (contd.)*

Jayashankar Mills Barsi Ltd., (The), Barsi Town. Mg. Agents—Zadbuke & Co, Office—mill premises. Spindles—11,840. Spg. Mstr.—M. D, Tungare. Cotton consumed 2,257 candies

Jehangir Vakil Mills Co. Ltd., (The), Outside Delhi Gate, Ahmedabad. Mg. Agents—Rustomjee Mangaldas & Co. Ltd., Office—mill premises. Ph :—Ahmedabad 2074-5. Spindles –34,072. Looms—761, Counts 14s to 50s. Spg. Mstr –S. T. Pathak, Wvg. Mstr —J. J. Daruwalla. Cotton consumed 5,386 Candies.

Kalyan Mills Ltd., Naroda Road, Ahmedabad. Directors-In-charge- R.R.Morarka, Office– millpremises. Ph :—Ahmedabad 2693 Spindles—13,260, Looms—393. Products—poplin, dhoti, saree- -grey, bleached, printed and dyed. Cloth width 29-52 in. Counts—36s to 40s. Spg. Mstr. Sorabji K. Bhaisa, Wvg. Mstr.—V J. Joshi. Cotton consumed 441 Candies.

Kanti Cotton Mills, (The), Surendranagar, Wadhawan Camp, Saurashtra. Mg. Agents– Chandulal Ratilal & Co. Office-- mill premises. Ph :- (office) 22 & 22a. Spindles 15,724, Looms—316, Products—shirting, longcloth, sheeting, drill, uncalendered drill. Cloth width 27-45 in. Counts—single yarns 18s to 26s. Spg. Mstr.—Mohamed Alibhai, Wvg. Mstr.—V. M. Mehta. Cotton Consumed 4,183 Candies.

Keshav Mills Co. Ltd, (The), Petlad, via Anand, Baroda State Mg. Agents—Chandulal Keshavlal & Co. Office—mill premises. Ph :—302. Spindles—24,656, Looms—400. Products dhoti, poplin, mulmul, saree, sushis. Spg. Mstr.- C. C. Modi, Wvg. Mstr —Gopaldas Chunilal Parikh Cotton consumed 2,259 Candies.

Khandeish Spg. & Wvg. Mills Co. Ltd, (The), Jalgaon, East Kandesh Mg Agents - Indra Singh & Sons Ltd., Jamshedji Tata Road, Churchgate, Bombay. Ph :—(office) Bombay 32501, (mill) Jalgaon 21. Spindles—23,032, Looms—465. Products- longcloth, shirting, towel, leopard, coating, lint, sheeting. Cotton consumed 2,589 Candies.

Krishna Kumar Mills Co. Ltd., (The), Mahuva, Saurashtra. Mg. Agents—Surendranath Maganlal & Co. Office—mill premises. Spindles—8,496, Counts—10s to 20s. Spg. Mstr.—S. B Trivedi. Cotton Consumed 3,061 Candies.

Lakshmi Cotton Mfg. Co. Ltd., (The), Sholapur, Bombay. Mg. Agents—The Bombay Co. Ltd., Office—9, Wallace Street, Fort, Bombay. Ph :—(office), Bombay 25031 (mill) Sholapur 18. Spindles—51,924, Looms—1,213. Products—Coating, longcloth, dhoti, shirting Etc, Cloth width 18 64 in. Counts 1s/100s. Spg. Mstr.—J. J. Panday, Wvg. Mstr.—K. S. Amaria. Cotton consumed 7,889 Candies.

Lalbhai Tricumlal Mills Ltd., (The), Rakhial Road, Railwaypura Post, Ahmedabad. Mg. Agents—Chinubhai Lalbhai & Bros. Ltd., Office—mill premises. Ph :—Ahmedabad 5210 & 5460. Spindles—29,936, Looms-- 784. Products—bleached—shirting, poplin, dhoti, twill, satin, duck, leno, bedford, cord, saree; dyed—mull, voile tablecloth; printed—saree, chintz, fancy cloth. Cloth width 32-66 in. Counts—10s to 90s. Spg Mstr.—Dinker D. Ranade, Wvg. Mstr.— C T. Trivedi. Cotton consumed 3,884 Candies

Lokamanya Mills (Barsi) Ltd., (The), Arangaon Road, Barsi, Sholapur. Mg. Agents—B. P. Sulakhe. office— mill premises. Spindles—12,504. Spg. Mstr—H. B. Namjoshi. Cotton Consumed 2,084 Candies.

Madhavnagar Cotton Mills Ltd., Madhavnagar. Mg. Agents—Budhagaon Trading Co Ltd., Office—mill premises. Spindles –9,056, Looms—80. Counts—60s & 80s. Cotton consumed 695 Candies.

Mafatlal Fine Spg & Mfg. Co Ltd., (The), Vejalpur Road, Navsari, B. B & C I. Rly. Mg Agents—Navinchandra Purshotamdas & Co. Ltd. Office—mill premises. Ph :—Navsari 286. Spindles—47,260, Looms—896. Products—dhoti, saree, doria, lenos, shirting, mull, voile Etc., Spg. Mstr.—H R. Vimadlal, Wvg. Mstr.—Sham Gopal Adya. Cotton consumed 5,439 Candies.

Mahalaxmi Mills Ltd, (The), Near Chavdi Gate, Bhavnagar, Saurashtra. Mg Agents—Hargovandas Jivandas & Sons Ltd, Office—mill premises. Ph :—Bhavnagar 483 Spindles—20,688. Looms—480. Products—crepe, longcloth, mull, satin etc. Cloth width 36-60 in. Counts—12s to 18s. & 32s. 42s. Spg. Mstrs—Apabhai K. Almeker & Barkatulla R. Sheikh, Wvg. Mstr.—Kantilal G. Bhatt. Cotton consumed 6,473 Candies.

Maharana Mills Ltd., Porbandar, Saurashtra. Mg. Agents—Sheth Dhirendrabhai N. Mehta. Office—Uganda Road, Swastik Bhuvan, Porbandar,

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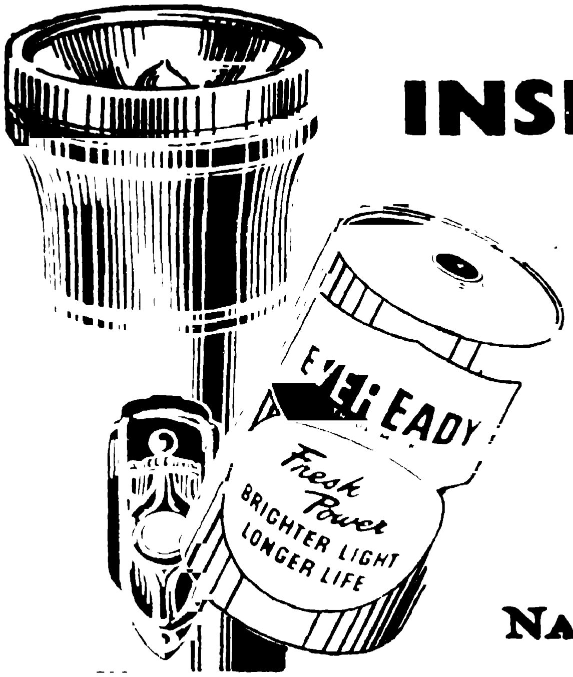

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BOMBAY PRESIDENCY—*Cotton Mills (contd)*

Spindles—23,780, Looms—586. Products—grey, bleached, dyed & printed—longcloth, mull, chintz, saree, crepe. Spg. Mstr—Nandkishore B. Sheth, Wvg. Mstr—Bhagwandas Tulsidas Parikh. Cotton consumed 5 833 Candies.

Maheshwari Mills Ltd . Shahibag Road, Ahmedabad. Mg. Agents—Dhirajlal Khushaldas & Co. Ltd . Office—mill premises Ph—(mill) Ahmedabad 2701 Spindles—21,032, Looms—523. Products—dhoti, poplin, voile, chintz, shirting, mull, saree Cloth width 28 60 in Counts—36s to 60s. Wvg Mstr—S G Patel Cotton consumed 1,774 Candies.

Maneckchock & Ahmedabad Mfg. Co. Ltd., (The). Asarva , Ahmedabad Mg Agents—Hiralal Tricumlal & Sons Office—mill premises. Ph: Ahmedabad 2026 Spindles—31,128, Looms—832. Products -grey—dhoti, longcloth, tent-cloth, saree ; blaached - dhoti, longcloth, mull, saree, sushis; dyed—sushis, poplin; printed—chintz. Cloth width 22-48 in Counts—18s, 24s, 38s, 42s. 44s, 58s. Spg. Mstr.—R. K Pathak, Wvg. Mstr.—F D. Shah. Cotton consumed 3,342 Candies.

Maneklal Harilal Spg. & Mfg Co Ltd , (The), Saraspur Road, Ahmedabad Mg Agents—Harilal Harivallabhdas & Co. Ltd , Ph : (office) Ahmedabad 2099. Spindles—33,636, Looms—750. Products—grey—dhoti, saree, sheeting ; dyed—crepe, twill, doria, poplin ; bleached—crepe, sheeting, longcloth, mull, poplin ; printed—chintz, poplin, crepe. Cloth width 32-66 in. Spg. Mstr—G. B. Desai. Cotton consumed 6,421 Candies.

Marathe Textile Mills, Near Railway Station, Miraj Mg. Agants—B. K. Marathe & Sons Office - mill premises. Ph :—28584. Spindles—5,412. Products—grey—longcloth, saree ; dyed—saree Cloth width 48-56 in. Counts—6s to 40s Spg. Mstr.—S. V. Kanitkar, Wvg Mstr—P. Katkar. Cotton consumed 122 Candies

Marsden Spg. & Mfg. Co. Ltd , (The), Gomtipore Post Ahmedabad. Mg.Agents—Marsden Bros. & Co Ltd , Office—mill premises. Ph :—Ahmedabad 5254. Spindles—22,244, Looms—482. Products—grey—longcloth, poplin, dhoti, dosuti, lawn, drill ; bleached—longcloth, poplin, dhoti, twill, drill ; dyed—poplin, twill, drill, longcloth. Spg. Mstrs.—T. S. Parikh, R. S. Bhatt (night). A. R. Pandya., Wvg. Mstr.—Jehangirji R Patel. Cotton consumed 5,304 Candies.

Monogram Mills Co Ltd., (The), Rakhial, Ahmedabad. Mg. Agents—Manilal Marsden & Co. Ltd , Office—mill premises. Ph :—Ahmedabad 5104 & 5552. Spindles—24,872, Looms—528. Products—grey & bleached—doria, drill, sheeting ; bleached—cambric, poplin, dhoti, doria, longcloth, mull, saree ; dyed—pugri cloth, vegetable-dyed Khaki. twill. Cloth width 20-60 in. Spg. Mstr—M. M. Patel, Wvg. Mstr—R. R, Patel. Cotton consumed 6,034 Candies.

Motilal Hirabhai Spg Wvg & Mfg. Co , Ltd., Kalupur, Ahmedabad

Nagri Mills Co Ltd , (The), Rajpur, Gomtipur Road, Ahmedabad Mg Agents—Pepatlal Chimanlal & Co. Ltd., Office—mill premises. Ph :—Ahmedabad 5148. Spindles—22,936, Looms—500. Products—grey—longcloth. dhoti ; bleached & dyed—dhoti, longcloth, mull, poplin Etc . Cloth width 32-62 in Counts -20s—30s & 40s. Spg Mstr. Harshadrai C. Thakore, Wvg. Mstr—H. C. Parikh. Cotton consumed 1,853 Candies

Nanikram Sobhraj Mills Ltd , (The), Manhowbhai Colony, Railwaypura, Ahmedabad. Mg Agents—J. Kimatrai & Co , Office—mill premises. Ph :—Ahmedabad 2728. Products—coating, bedsheet, dhoti, jean, longcloth, poplin, shirting, towel, twill Looms—300. Cloth width 29-50 in.

Narayandas Chunilal Cotton Spg. & Wvg Mills (The), Gadag. Dist. Dharwar Props—Tarabai Motilal Hirakhanwala. Bombay office—36 Ridge Road, Malabar Hill. Ph :—27122. Spindles—11,384, Looms -212 Products—grey and unbleached dhoti, longcloth, shirting and fancy dhoti. Cloth width 31 50 in. Spg. Mstr.—R G. Kulkarni, Wvg, Mstr.—Narayan Rao V. Bellary. Cotton consumed —1,314 Candies

Narsinggirji Mfg. Co. Ltd. (The), Station Road, Sholapur. Mg. Agents—Dhanrajgir Raja Narsinggirji. Office—Dhanaraj Mahal Apollo Pier Road, Bombay. Spindles—52,488, Looms—1,170. Products—dobby and jacquard chaddar, dhoti ; bleached—dhoti, coating ; grey—khadi, longcloth, saree, mull, dosuti Etc., Cloth width 25-88 in. Spg. Mstr,—S. L. Bhattacharjee, Wvg. Mstr.—

BOMBAY PRESIDENCY—*Cotton Mills (contd.)*

Major K. C. Goude. Cotton consumed 10,080 Candies.

Navjivan Mills Ltd, Station Road, Kalol, North Gujrat, Baroda State. Mg. Agents—Rustomjee Mangaldas & Co. Office—mill premises. Ph :—66. Spindles—24,372, Looms – 510. Products—Grey & bleached—dhoti, longcloth, saree, shirting, sushis ; dyed—poplin. Cloth width 36-62 in. Counts—20s to 80s. Spg. Mstr.—P. M. Dave. Wvg. Mstr.—J. J. Daruwala. Cotton consumed 3,125 Candies.

Navsari Cotton & Silk Mills Ltd., (The), Navsari. Mg Agents—H. M. Mehta & Sons Ltd, Office—mill premises. Ph :—(office) 288 Spindles—1,8520, Looms—435. Products—mull, saree, poplin, shirting, dhoti, voile, doria ; bleached—poplin, dhoti, saree Etc, Cloth width 24-52 in. Counts-35s, 40s. 60s, 80s. Spg. Mstr.—H. M. Shah. Wvg. Mstr.—N. C. Passawalla, Cotton consumed 2,538 Candies.

New Chhotalal Mills Ltd, (The), Khadi, (Mehsana Dist), North Gujerat, Baroda State. Mg Agents—Chhotalal Hirachand & Sons. Office—mill premises. Ph :—P. C O. 42. Spindles19,440, Looms- 404. Products—dhoti, saree, longcloth, sushis. Counts-18s/24s, 36s/40s. Spg. Mstr.—C. M. Patel, Wvg. Mstr—P. S. Nair. Cotton Consumed 2,992 Candies.

New Commecial Mills Co Ltd., (The), Naroda Road, Ahmedabad. Mg. Agents—Tricumlal Bhogilal & Co. Office—mill premises. Ph :—(office) Ahmedabad 2700, (mill) 2211. Spindles—39,316. Looms—866. Products—poplin, saree, chintz voile, twill, shirting, mull Etc., bleached—longcloth, towel Etc., grey--Longcloth: dyed--shirting, poplin: printed--voile, chintz, doria. Cloth width 30-64 in. Spg. Mstr.—G. W. Taylor, Wvg. Mstr—Hariprasad I. Mehta Cotton Consumed 5,130 Candies.

New India Industries Ltd., Jetalpur Road, Baroda. Mg. Agents—Distributors (Baroda) Ltd, Race Course Road, Baroda. Spindles –12,996. Cotton consumed 1,201 Candies.

New Jehangir Vakil Mills Co. Ltd., (The), Bhavnagar, Saurastra. Mg. Agents—Rustomji Mangaldas & Co. Office—mill premises. Ph :—Bhavnagar 580. Spindles– 31,940, Looms– 714 Products—grey—shirting, longcloth ; dyed—poplin ; printed—saree, chintz ; bleached—dhoti, voile, saree, longcloth Etc., Spg. Mstr.—Motilal B. Shah, Wvg. Mstr.—E. Sion. Cotton consumed 5,370 Candies.

New Maneckchowk Spg. & Wvg. Co. Ltd, (The), out side Dariapur gate, Ahmedabad. Mg. Agents—Lalbhai Tricumlal. Office – mill premises. Ph :—Ahmedabad 2049 & 2494 Spindles– 29,656, Looms 607. Products– grey, bleached & dyed—crepe, saree, mull, dhoti, drill, doria, longcloth, shirting Cloth width 29-56 in Counts- 20s/30s, 35s/42s, 40s/60s, 2s/42s, 2s/60s. Spg. Mstr.—Khemchand P. Patel, Wvg. Mstr.—Madhubhai B. Mehta. Cotton consumed 4,506 Candies.

New National Mills Ltd., Rakhial Road, Ahmedabad. Mg Agents—Tricumlal Bhogilal Sons & Co. Office—mill premises. Ph:—5286 Spindles-21,760, Looms 474. Products—poplin, saree, dhoti, mull, shirting Etc., Cloth width 32-60 in. Counts– 40s, 60s, 80s. Spg. Mstr.—R. L Desai, Wvg. Mstr—Phillip E. Dees. Cotton consumed 2, 604 Candies.

New Pratap Spg. Wvg. & Mfg Co. Ltd., (The), Dhulia, West Khandesh Mg. Agents—Motilal Manekchand & Sons. Office– mill premises. Ph :—Dhulia 23. Spindles 46,136, Looms 1,058. Products—grey, bleached & dyed—saree, dhoti, chaddar, longcloth. Cloth width 25-60 in. Counts—10s, 24s, 28s, 36s, 2/26s, 2/28s, 2/36s. Spg. Mstr :—N. M. Lothe, Wvg. Mstr.— D. P. Malusare. Cotton consumed 5,142 Candies.

New Rajpur Mills Co. Ltd., (The), Gomtipore Road, Railwaypura Post, Ahmedabad. Mg. Agents—Bhikhabhai Jivabhai & Co Office—mill premises. Ph :—Ahmedabad 5297. Spindles—23,688, Looms 424. Products—grey—dhoti, saree, mull; bleached—dhoti, doria, longcloth, mull, poplin Etc., Cloth width 29-54 in. Spg. Mstr. Darasha R. Mehta, Wvg. Mstr.—M. N. Pandaya. Cotton consumed 2, 217 Candies.

New Shorrock Spg. & Mfg. Co. Ltd, (The). Nadiad. Dist. Kaira. Mg. Agents—Mafatlal Chandulal & Co. Ltd, Office—mill premises. Spindles—47,952, Looms—865. Products—grey – longcloth, saree ; bleached—dhoti, mull, shirting, saree Etc., dyed– shirting, mull, saree, pattos. Cloth width 29 64 in. Counts – 32s to 100s. Spg. Mstr.—K. R. Sitwala, Wvg. Mstr. J. Berry. Cotton consumed 4,793 Candies.

BOMBAY PRESIDENCY—*Cotton Mills (contd)*

New Swadeshi Mills of Ahmedabad Ltd., (The), Naroda Road, Ahmedabad. Office—mill premises. Ph :—Ahmedabad 2828. Spindles—35,312, Looms - 796. Products—bedsheet, coating, netting, mazri cloth, print, voile, mull Etc., Cloth width 28-56 in. Counts-18s to 42s. Spg. Mstr.—N. D. Nadirshah, Wvg. Mstr.—A. P. Chatterjee. Cotton consumed 9,980 Candies.

Niranjan Mills Ltd., (The), Falsawadi, Surat. Mg. Agents—Shapoorji & Co. Office—mill premises. Ph :—Surat 51 Spindles - 9,088 Looms—320. Products—grey & bleached—longcloth, mull, poplin, saree, voile, shirting Etc., Cloth width 26-56 in. Counts - 30s/40s. Spg Mstr.—M. M. Khajotia, Wvg. Mstr.—J. B. Karai. Cotton consumed 1,298 Candies.

Nutan Mills Ltd., (The), Saraspua Road, Ahmedabad. Mg. Agents -Jagabhai Bhogilal Nanavaty & Co Ltd., Office—mill premises. Ph :— Ahmedabad 2672. Spindles— 20,840. Looms—506. Products—bleached—dhoti, longcloth, mull, poplin, saree, sushis, twill, voile. Cloth width 26-51 in. Spg. Mstr.—R. T. Aminbhavi, Wvg. Mstr.—C. C. Ray. Cotton consumed 3,436 Candies.

Patell Mills Co. Ltd., (The), Gomtipur Road, Ahmedabad. Mg. Agents—Dhirajlal Chunilal & Co. Office—mill premises. Ph :—Ahmedabad 5362. Spindles—13,824, Looms --356. Products—dhoti, saree, shirting, sushis, patto. Cloth width 25-50 in. Counts-36s to 60s. Spg. Mstr —Pushottamdas S. Patel. Wvg. Mstr.—Bhagvatprasad C. Shah. Cotton consumed 1,304 Candies.

Petlad Bulakhidas Mills Co Ltd., (The), Near Station, Road, Petlad. Via (Anand) Baroda State. Mg. Agents—Motilal Kashandas & Co. Office—mill premises. Ph :—383. Spindles—18,256. Spg. Mstr. —R. J. Vyas. Cotton consumed 4,419 Candies

Pratap Spg. Wvg. & Mfg. Co. Ltd., (The), Amalner, East Kandesh. Mg. Agents—Motilal Menekchand & Co. Office—mill premises. Ph :—C. P. O 23. Spindles—48,952, Looms—1,083. Products—saree, dhoti, check shirting, seshis, longcloth. Cloth width 28-84 in. Counts-2½s, 2½s, 13s, 18s, 24s, 26s, 2/28s, 32s, 36s, 40s. Spg. Mstr.—G. V. Deshpande, Wvg. Mstr —W. G. Dhawale. Cotton consumed 5,925 Candies.

Raipur Mfg. Co. Ltd., (The), Outside Saraspur Gate, Ahmedabad Mg. Agents—Lalbhai Dalpatbhai & Co. Office —mill premises. Ph : (office), Ahmedabad 5187 (mill) 5247. Spindles—31,120, Looms—637. Products—dhoti, lawn, mercerised poplin, twill, voile Etc., Cloth width 36-08 in Counts—fine above 38s. Spg. Mstr — D. N Dastoor, Wvg. Mstr.—N. C. Diwanji Cotton consumed 2,375 Candies.

Raja Bahadur Motilal Poona Mills Ltd., (The), 5. Raja Bahadur Matilal Road, Poona. Mg. Agents—Mukundlal Bansilal & Sons, Hamam House, Hamam Street, Fort, Bombay. Ph :—(office) Bombay 22112, (mill) Poona 2451. Spindles—17,568 Looms 568. Products—saree, chaddar, coating, towel, twill, lathas, bed-ticking Ect —(grey, bleached, dyed & printed) Cloth width 25-60 in. Counts—10s to 80s Spg Mstr.—C. R. Parikh, Wvg. Mstr.—K. M. Hungund. Cotton consumed 4,475 Candies.

Raja Raghunathrao Mills, Bhor, (Poona Dist). Owners—Maharashtra Textiles Ltd , Office—mill premises Spindles--852, Looms- 41, Products-nainshook, dhoti, saree, chintz, drill, longcloth Etc., Cloth width 33-52 in. Wvg. Mstr. —K. S. Joglekar. Spindles not working.

Rajkot Spg. & Wvg. Mills Ltd., (The), Karansinghji Cross Road, Saurashtra. Mg. Agents—Shapoorji Pallonji & Co Ltd., Office – mill premises. Ph:—Rajkot 26 Spindles - 10,872, Looms—235. Products—dhoti, shirting, sushis, tent cloth ; grey—dosuties, saree, shirting, longcloth ; bleached - Chaddar, dhoti, saree Etc., Cloth width 27-56 in. Spg. Mstr.—D. S. Cooper, Wvg. Mstr.—R H. Colah. Cotton consumed 2,111 Candies.

Rajnagar Spg. Wvg. & Mfg. Co. Ltd., (The), No. 1 & 2 Mills, near Idgah Gate, Ahmedabad. Mg. Agents—Mangaldas Girdhardas Parekh Ltd., Office—mill premises. Ph :—(mill & office) Ahmedabad 2028 Spindles— 45,568, Looms—1,127, Products—dhoti, shirting, saree, longcloth, mull Ect., Cloth width 20-59 in. Counts—18s to 78s. Cotton consumed 6,031 Candies.

Rajratna Naranbhai Mills Co. Ltd., (The), Petlad, Mg. Agents—Ramanlal Keshavlal & Co.

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BOMBAY PRESIDENCY—*Cotton Mills* (*contd.*)

Near Station, Petlad, Baroda. Ph: Baroda 304 Spindles 25,552, Looms—414. Products—grey & bleached—dhoti, saree, chaddar, poplin; dyed—poplin. Cloth width—28-68 in Counts—18s, 24s, 42s, 44s 58s. Spg. Mstr.—Shantilal N. Upadyaya, Wvg Mstr.—Kantilal Maneklal Khaidia. Cotton consumed 3,373 Candies.

Rohit Mills Ltd . Mithipur Ahmedabad Mg Agents—Lalubhai Gordhandas Ltd. Office—mill premises. Ph :—(office) Ahmedabad 5026, (mill) 5027. Spindles—28,188, Looms—648. Products—saree, dhoti, poplin, mull, malmal, mesh Cloth, mosquito net, shirting Etc , Cloth width 24-64 in. Counts 14s, 20s, 30s, 36s, 44s, 60s, 80s. Spg Mstr—A J. Joshi, Wvg Mstr—B A. Patel Cotton consumed 3,728 Candies.

Rustom Jehangir Vakil Mills Co. Ltd, (The), Dudheshwar Road, Outside Delhi Gate, Ahmedabad. Mg. Agents—Kantilal Shantilal & Co Office—mill premises. Ph .—Ahmedabad 2151. Spindles—21,780, Looms—406 Products - dhoti, saree, longcloth, mull, sushis. Cloth width 32 60 in. Counts—20s, 30s, 40s, 45s, 54s, 60s, 80s Spg. Mstr—J. T Pathak, Wvg Mstr—J J. Daruwala. Cotton consumed 2,300 Candies.

Santokbai Spg & Wvg. Factory (The), Nari Road, Bhavnagar, Saurashtra Owners—G. Gandalal Gundigara. Office mill premises Ph :—Bhavnagar 649. Spindles 3,272. Cloth width 20-44 in. Spg. Mstr—Rasulbhai Kalubhai. (Not working since Sept 1948.)

Sarangpur Cotton Mfg. Co. Ltd , (The), No. 1 Mill, Outside Raipur Gate, Kankaria Road, Ahmedabad. Mg. Agents.—Sakarlal Balabhai & Co Ltd Office—mill premises Ph :—Ahmedabad 5203 Spindles—64,648. Looms—1,449 Products—dhoti, saree, longcloth, mock lenos, shirting, twill, turkish, towel. Cloth width 32-64 in. Counts—34s, 40s, 70s, 80s. Wvg. Mstr.—J. J. Daruwala, Cotton consumed 9047 Candies.

Sarangpur Cotton Mfg. Co. Ltd, (The), No 2 Mill, Nr. Jagnath Mahedev. Kankaria Road, Ahmedabad. Mg Agents—Sakarlal Balabhai & Co. Ltd., Office—mill premises. Ph .—Ahmedabad 5183. Spindles—64,648, Looms—1,449. Products—dhoti, saree, longcloth, shirting, twill, poplin Etc., Cloth width 30—52 in. Counts—20s, 30s, 40s, 60s. Cotton Consumed 9,047 Candies.

Saraspur Mills Ltd., (The), Saraspur Road, Railwaypura Post, Ahamodabad. Mg. Agents—Lalbhai Dalpatbhai Sons & Co., Office—mill premises. Ph: —Ahmedabad 2055. Spindles—35,196, Looms—856. Products—medium and coarse yarns, and grey bleached, and dyed cotton piece goods. Cloth width 27—54 in Spg. Mstrs.—P. M. Patel & G R. Kinkhabwala. Cotton consumed 6,514 Candies.

Secunder Sari & Silk Mills, Sowdagar Mohalla, Bhiwandi, Dist. Thana, Bombay. Prop—Abdul Quadir Secunder Patel. Office—mill premises Looms—103. Products—silk saree, coloured saree, kobes, sateen Etc Cloth width 24—54 in

Shah Spg. & Wvg. Mills Anjar, Kutch (formerly Anjar Spg & Wvg. Mills). Prop—Premchand Vrajpal Shah. Spindles—5,312. Spg. Mstr.—V. B. Konnur. Cotton consumed 454 Candies.

Sholapur Spg. & Wvg. Co Ltd., (The), Station Road, Sholapur. Managed by board of directors, Sir Vithal N. Chandavarkar, Tulsidas Kilachand, V. D. Sirur, H. R Ratlivala, A S. Naik & J. K. Thakore. Standard Bldg., Hornby Road, Fort, Bombay. Ph:—Sholapur 17. Spindles—1,05,296. Looms—2,234. Products—check, coating, canvas, longcloth ; grey—dhoti, net cloth, lungee, shirting Etc., Cloth width 27-72 in. Counts—1½s to 80s. Cotton consumed 11,147 Candies.

Shorrock Spg. & Mfg. Co. Ltd., (The), Asarva Road, Ahmedabad. Mg. Agents—Mafatlal Chandulal & Co. (Ahmedabad) Ltd., Office—mill premises. Ph : —Ahmedabad 2079. Spindles—36,624, Looms—720. Products—bleached—dhoti, longcloth, shirting Etc., dyed—poplin, voil, longcloth. Cloth width 36—64 in. Counts—22s to 58s. Spg. Mstr.—S. D. Patel, Wvg. Mstr.—P. H. Gobole. Cotton consumed 5,125 Candies.

Shree Balaji Spg. Wvg. & Oil Mills (The), Sangli, Satara. Prop—Jaynarayan Shivanath Ladda. Office—mill premises. Spindles—5,476. Looms—96. Products—grey—khadi, longcloth, Cloth width 28—56 in. Spg. Mstr—K. R. Shinde. Wvg. Mstr.—N. S. Abdulkarim. Cotton consumed 500 Candies.

Shree Digvijayasinhji Spg. & Wvg. Mills Ltd., Jamnagar, Saurashtra. Mg. Agents--Chaitanyakumar

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BOMBAY PRESIDENCY—*Cotton Mills (contd.)*

Mangaldas & Co, Office—mill premises Spindles—15,000, Looms—100. Products—grey & bleached—shirting, chaddar, dosuti, longcloth, mull, doria. coating Cloth width 25 52 in Spg. Mstr.—F. R. Randeria, Wvg. Mstr.—T. R. Trivedi, Cotton consumed 4,561 Candies.

Shree Hari Cotton Mills. Sidhpur, Baroda. Prop—Jalan Bros. Office—mill premises. Spindles—3,262. Counts—12s to 30s.

Shree Harshad Textile Mills, Jamnagar. Partners—P. V. Shah, D. K. Shah, G. M. Maroo Office—near Fulia Hanuman. Jamnagar. Looms—92. Products—grey—coating. shirting, chaddar, saree, drill Etc.

Shree Sayaji Jubilee Cotton & Jute Mills Co. Ltd., (The) near Railway Station, Sidhpur. Baroda State. Mg. Agents—Pralhadji Sevakram & Co. Ltd, Office—mill premises. Spindles—14,412 Looms—320. Products—longcloth, nakshi dhoti, poplin, saree sushis. Cloth width 27-60 in. Spg. Mstr.—Hary Harker, Wvg. Mstr.—Madhavlal M. Shah.

Shree Shrubhlaxmi Cotton Mills Ltd, Station Road, Cambay, District Kaira, Cambay State. Mg. Agents—Shree Govind Cotton Co Ltd. Office—mill premises. Ph :—(office) 48 Local. Spindles—18 688, Looms—340. Products—saree, dhoti, longcloth ; grey—saree, dhoti, longcloth, sheeting ; printed—poplin. Cloth width 29—52 in. Spg. Matr.—A K Almelkar, Wvg. Mstr.—J. A. Amin. Cotton consumed 1,878 Candies.

Shree Yamuna Mills Co. Ltd., Pratapnagar, Baroda. Mg. Agents—Zaverchand Laxmichand Bros. & Co. Office—mill premises. Ph :—2520, Spindles—24,248, Looms—632. Products—chaddar, dhoti, longcloth, saree, sushis, shirting Etc., Cloth width 32-62 in. Wvg. Mstr.—M. B. Desai. Cotton consumed 3,101 Candies.

Shri Amarsinhji Mills Ltd, Wankaner(Saurashtra). Mg. Agents—Jayantilal Amratlal & Co. Office—mill premises. Spindles—12,624. Looms—320. Products.—sheeting, saree, chaddar, takas, mull, poplin, cellular, mulmul, takas. Spg. Mstr.—S. K. Chatterjee, Wvg. Mstr.—M. M. Shah. Cotton consumed 3,427 Candies.

Shri Gajanan Wvg. Mills. Sudampuri, Sangli, Satara Porvince. Prop.—V. R. Velankar. Spindles—5,376. Looms—135. Products—dhoti, longcloth, saree, shirting, rayon fabric, turkish Etc, Cloth width 27-56 in. Counts-14s to 60s. Wvg Mstr.—R. K. Mirajkar.

Shri Jagdish Mills Ltd, (The). Padra Road, Baroda. Mg Agents—Jagdish (Agency) Ltd, Office—mill premises. Ph :—Baroda 2386. Spindles—20,320, Looms—408. Products—grey—dhoti, saree ; bleached-crepe, mull, saree Etc, dyed—coating, poplin, sushis. Cloth width 24-56 in. Spg. Mstr.—D. M. Desai, Wvg Mstr.—P. B. Mitra. Cotton consumed 2,221 Candies.

Shri Krishna Wvg. Mills, Vengurla Road, Belgaum. Ph :—147, Looms—40 Products—grey & bleacaed—chawal, Khadi, towel Etc. Cloth width 20-50 in.

Shri Laxmi Textile Mills Ltd., Bhor, Dist. Poona. Mg. Agents—The Bhor Mercantile Agency Ltd., Office—mill premises. Spindles—4,176. Counts spun-up to 30s. Spg. Mstr.—M. V. Limaye. Cotton consumed 536 Candies.

Shri Narayan Wvg. Mills. Ichalkaranji, S. M. C. Props—Sangle Bros. Office—mill premises. Looms-92.

Shri Ramesh Cotton Mills Ltd., (The), Morvi, Saurashtra. Mg. Agents—Morvi Industries Ltd., Office—mill premises. Spindles—12,000. Looms—324. Products—Khadi & standard cloth. Cloth width 29-55 in. Wvg. Mstr.—S. J. Karekar. Cotton consumed 2,550 Candies.

Shri Sayaji Mills Co. Ltd., (The), Opposite Old Railway Station, Baroda. Mg. Agents—Vadilal Lallubhai & Co Ltd., Office—mill premises. Ph :—Baroda 2634 & 2420. Spindles—36,004. Looms 602. Products—grey—longcloth, saree, dhoti ; bleached-longcloth, dhoti, saree, poplin ; dyed—poplin, shirting. Cloth width 26-58 in Spg. Mstr.—J. K. Shah, Wvg. Mstr.—B. R.—Desai. Cotton consumed 3,836 Candie .

Shri Shahu Chhatrapati Mills.—Kolhapur, Shahupuri. Mg. Agents—James Finlay & Co. Ltd, Chartered Bank Bldg, Fort, Bombay. Ph :—(office) Bombay 26547-9, (mill) Kolhapur 317. Spindles—15,988, Looms—320. Products—grey—coarse cloth, dhoti, longcloth, heavy shirting, dhoties. Cloth width 28 72 in. Spg. Mstr.—B. S. Ajgaonkar.

BOMBAY PRESIDENCY—*Cotton Mills (contd.)*

Wvg. Mstr.—A. S. Bandekar. Cotton consumed 3,887 Candies

Shri Vivekanand Mills Ltd., (The), Rakhial Road, Post Gomtipore, Ahmedabad Mg. Agents—Nanubhai Maneklal & Co. Ltd., Office—mill premises. Ph :—5318. Spindles-20,416, Looms-456 Products—dhoti, saree, doria, longcloth. poplin: grey—sushis, lungis, jacquard saree: bleached—dhoti, doria. mull: dyed—saree, sushis Cloth width 29-50 in. Spg. Mstr.- C. L. Parikh Wvg. Mstr— Jaswantlal P. Desai Cotton consumed 2,976 Candies.

Sidhpur Mills Co. Ltd, (The), Bindu Sarovar Sidhpur. Mg Agents - Maganlal Parbhudas & Co. Office—mill premises. Spindles—27,760, Looms 306 Products - grey —longcloth, shirting, sheeting, drill. Cloth width 32-63 in. Counts—18s to 40s. Spg. Mstr - C C. Dalal, Wvg Mstr.- B D Modi. Cotton consumed 5,856 Candies.

Silver Cotton Mills Co Ltd. (The), near Jagnath Mahadew. Kankaria Road, Ahmedabad. Mg. Agents—Gopalbhai Balabhai & Co. Office—mill premises. Ph :—Ahmedabad 5358. Spindles-21,988, Looms-506. Products - longcloth, printed cintz, crepe, khaki, dyed poplin. Cloth width 32-60 in. Counts—20s, 30s, 36s, 38s, 40s. Wvg. Mstr.—J. J. Daruwala. Cotton consumed 3,498 Candies.

Surat Cotton Spg. & Wvg Mills Ltd., (The), Nawabwadi. Surat Mg. Director - Seth Navinchandra Mafatlal Gagalbhai, 29, Veer Nariman Road, Fort. Bombay. Ph :—(office) Bombay 30069. (mill) Surat 69 & 329. Spindles—20,308, Looms—476. Products —dhoti, saree, longcloth, poplin Etc., bleached —dhoti, longcloth, mull Etc, grey—coating, sushis. Counts 40s to 80s. Spg. Mstr — R. M. Patel Wvg. Mstr.—V. K. Karlusker. Cotton consumed 2,839 Candies.

Surat Textile Mills Ltd, Varachha Road, Surat. Mg. Agents—Kanchanlal Kapadia & Co. Ltd., Spindles—9,600, Counts—20s to 40s. Cotton consumed 154 Candies

Swadeshi Wvg. Mills (The), Opp. Electric Power House, Panvadi Road, Bhavnagar. Mg. Agents—Thakker Brothers. Office—mill premises. Ph :—Bhavnagar 453. Looms—65. Products—artificial silk counterpanes, khadi towel, napkin Cloth width 24—54 in. Wvg. Mstr.—M. Vala.

Tikekar Textile Mill Ltd., Tikekarwadi, Sholapur Dt. Mg. Agents—Naik & Co. Office—mill premises. Ph :—169 & 196. Looms—60. Products—Saree, dhoti, towel, bedsheet, dosuties ; grey—bedsheet ; bleached— towel, dosuties. Cloth width 30 50 in.

Venkatesh Rang Tantu Mills, Ichalkaranji S. M. C. Ry. Station, Nandol. Prop—S. K. Datar, A. V. Datar, Y. V. Datar, and M. V. Datar. Office—mill premises. Looms—56. Products sheeting, dhoti. Cloth width 36 - 52 in.

Vijaya Mills Co. Ltd., (The), Naroda Road, Ahmedabad. Mg Agents—Haridas Achratlal & Sons, Office—mill premises. Ph :— Ahmedabad 2896/7. Spindles—28,816, Looms—680. Products—longcloth, poplin, shirting : printed-chintz, poplin, doria ; bleached- longcloth, poplin Etc., Cloth width 30—79 in. Counts—19s to 24s, 36s to 42s, 60s to 80s Spg. Mstr. -S. M. Shah, Wvg. Mstr.—A. G. Waghle. Cotton consumed—4,517 Candies.

Vikram Mills Ltd.. (The), Railwaypura Post, Outside Saraspur Gate, Ahmedabad Mg. Agents—Ramanlal Lallubhai Ltd., Office mill premises. Ph :—Ahmedabad 5542 Spindles—35,340. Looms—800. Products—dhoti, saree, doria, mull, voile, sushis ; bleached, dyed, mercerised and printed—haircord, crepe, coating, chintz, longcloth Cloth width 28—56 in. Spg. Mstr.—Mangaldas G Desai. Wvg. Mstr —J. R. D. Kharidia. Cotton consumed 5,020 Candies.

Vishnu Cotton Mill Ltd., (The), Sholapur, Mg, Agents—The Bombay Co. Ltd., 9, Wallace Street, Fort, Bombay. Ph :—(office) Bombay 25031, (mill) Sholapur 18. Spindles—54,280, Looms—1,495. Products—coating, dhoti, longcloth saree, shirting Etc., Cloth width 18-72 in. Spg. Mstr.—K. C. Patel, Wvg. Mstr.—S. J. Jassawalla., Cotton consumed 8,755 Candies.

DECCAN

Aurungabad Mills Ltd., (The), Aurungabad. Mg. Agents—Gupta Sons Ltd., Office—mill premises. Ph :—Aurungabad 10. Spindles—11,536, Looms—271. Products—grey—sheeting, dhoti, tapestries. Cloth width—26-116 in, Cotton consumed 2,274 Candies.

Azam Jahi Mills Ltd., (The), Warangal, Hyderabad, Deccan. Agents—The Industrial Trust Fund, Government of Hyderabad, 159, Gunfoundry Road, Hyderabad, Deccan. Ph :—(office) Hyderabad 4738, (mill) Warangal 46. Spindles—19.944, Looms 440. Products—chaddar, cabot, dhoti, drill, shirting, longcloth, leopard, twill, sheeting, napkin, dobby cloth Etc., Cloth width—25-90 in. Counts—6s to 30s. Spg. Mstr.—Nariman Baxter, Wvg. Mstr.—A. A. Aziz. Cotton consumed 9,240 Candies.

Dewan Bahadur Ramgopal Mills Ltd., (The), Secunderabad. Mg. Agents—Lachminarayan Ramgopal & Sons Ltd., Office—mill premises. Ph .— 5459. Spindles—16,376, Looms—324. Products—grey—chaddar, dhoti, mull, khadi, saree, longcloth ; bleached—mull, napkin, khadi, chaddar, sheeting Etc., dyed—maduras, paramattas ; printed—chintz. Cloth width—28-80 in. Counts—12½s to 40s. Spg. Mstr.—R. V. Sovani, Wvg. Mstr.—Krishnaram Athakar. Cotton consumed 3,938 Candies.

Hyderabad (Deccan) Spg. & Wvg. Co. Ltd., (The), Elchigudda, Secunderabad. Secys. Treasurers & Agents—Mahaboob Shahi Kulbarga Mills Co. Ltd., Ph :—7492 Spindles—11,960, Looms—241. Products—longcloth, sheeting, dhoti, saree, shirting; coating, mulmul chaddar, towel, bed ticking. Cloth width 24-80 in. Counts—6s to 30s. Spg. Mstr.—Chas. E. Sawyers, Wvg. Mstr.—P. D. Munshi. Cotton consumed 1,543 Candies.

Jiwan Textile Mills, Hyderabad. Deccan. Prop—R. R. Jeevanlal, Pathengatty, Hyderabad. Ph :—Hyderabad 4048 & 4897. Looms—58. Products—rayon, silk and cotton shirting, chaddar, dhoti, saree, longcloth, sheeting Etc., Cloth width 27-60 in. Wvg. Mstr.—K. B. Nayak.

Mahaboob Shahi Kulbarga Mills Co. Ltd., (The), Gulbarga. Agents—Dayaram Surajmal Lahoti, Begumpet, Deccan. Spindles—27,764, Looms—606. Products—grey—sheeting, khadi, longcloth, shirting, bed ticking ; bleached—longcloth, shirting, bedford, handkerchief, dhoti, saree, mull, twill Etc., ; dyed—crepe, shirting, curtain cloth, coating ; Printed—chintz. Cloth width—25-68 in. Counts—1½s to 40s. Spg. Mstr.—A. Viraswamy Naidu, Wvg. Mstr.—V. R. Asodekar. Cotton consumed 7,851 Candies.

Osmanshahi Mills Ltd., (The), Nanded. Agents—The Industrial Trust Fund, Govt. of Hyderabad, 159, Gunfoundry Road, Deccan. Ph :—Hyderabad 2738. Spindles—26,016, Looms—640. Products—fine longcloth, sushis ; grey- chaddar, dhoti, domestics, longcloth, mull, safas ; dyed—mull ; bleached—longcloth, mull, safas. Wvg. Mstr.—P. K. Panse. Cotton consumed 10,537 candies.

MADRAS

Aaron Spg. & Wvg Mills Ltd., (The), Pappinissen, N. Malabar. Mg. Director—C. Samuel Aaron Office—mill premises. Ph :— Cannanore 51. Spindles—12,300, Looms—374. Products—coating, shirting ; furnishing fabrics— curtain material, bedsheet and cover, table and teapot covers, napkin, turkish towel ; bleached—mull, dhoti. Cloth width 27-60 in. Counts—20s to 60s. Cotton consumed 1,463 candies.

Asher Textiles Ltd., (The), Tiruppur. Mg. Agents—Textile Corporation Ltd., Avanashi Road, Tiruppur. Spindles—20,000. Cotton consumed 1,696 Candies.

Balakrishna Mills Ltd., 47, East Madura Station Road, Mathurai. Agents—A. H. S. Ramaswamy Iyer & Sons. Office—mill premises. Looms—83. Products—grey—shirting, dhoti. Cloth width 40-58 in.

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MADRAS—*Cotton Mills (contd)*

Buckingham & Carnatic Co. Ltd., (The), (Buckingham Mill), Perambur, Madras. Mg. Agents—Binny & Co. (Madras) Ltd., Armenian Street, Madras. Ph :—(office) Madras 2974/2977. Spindles—1,19,916, Looms—2,799 Products—bleached & dyed—drill, crepe, shirting, tussores, canvas, coloured woven poplin, shirting, suiting, turkish towel. Cotton consumed 32,436 Candies.

Cambodia Mills Ltd., (The), Singanallur, Coimbatore Dist. Mg. Agents—Peirce, Leslie & Co. Ltd., Race Course, Coimbatore. Ph : (office) 16, (mill) 19. Spindles—37,536, Looms—4. Products—cotton yarns and cambessa. Cloth width 40-46 in. Counts—2s to 40s. Spg. Mstr.—K. G. Gopalan Nair. Cotton consumed 7,165 Candies.

Cannanore Spg. & Wvg. Mills Ltd., Cannanore. Mg. Agents—Malabar Industrial Syndicate. Office—mill premises. Ph :—66. Spindles—14,400. Counts—18s to 50s. Spg. Mstr.—S. S. Bhargava. Cotton consumed 3,342 Candies.

Cauvery Spg. & Wvg. Mills Ltd., Vellanur. Mg. Agents—United Industries (Pudukkottai) Ltd., Office—Mill premises. Ph .—Pudukkottai 7, Spindles—11,616. Caunts—36s to 40s. Cotton consumed 617 Candies.

Coimbatore Cotton Mills Ltd., (The), Singanallur. Mg. Agents—R. B. Naidu & Co., Office—mill premises. Ph :—(office & mill) Coimbatore 65. Spindles—28,864 Counts—20s to 60s. Spg. Mstr.—G. Doraiswamy. Cotton consumed 4,245 Candies.

Coimbatore Kamala Mills Ltd., (The), Singanallur. Agents—R. V. Lakshmaiah Naidu & Co., Office—mill premises. Ph :—Singanallur 126. Spindles—16,400. Spg. Mstr.—S. Srinivasan. Cotton consumed 1,293 Candies.

Coimbatore Murugan Mills Ltd., (The), Mettupalayam Road, Coimbatore. Agents—T. A. Ramalingam Chettiar, Sons & Co. Office—mill premises. Ph :—Coimbatore 135, Spindles—19,460. Cotton consumed 2,348 Candies.

Coimbatore Pioneer Mills Ltd, (The), Peelamedu, Coimbatore. Agents—T. R. Narayanaswamy Naidu & Co. Ph :—(office) Coimbatore 160. Spindles 19,700. Spg. Mstr.—K. S. Naidu. Cotton consumed 1,837 Candies.

Coimbatore Spg. & Wvg. Co. Ltd., Mill Road, Coimbatore. Secys. & Agents—R. G. S. Naidu & Co. Box No. 24, Coimbatore. Spindles—72,188. Looms—407. Cotton consumed—6,877 Candies.

Commonwealth Wvg. Factory, (The), Cannanore. Owners—The Commonwealth Trust Ltd., Kozhikode, (Malabar). Ph :—(office & mill) 43. Looms—312. Products—shirting and suiting.

Dawood Mills Ltd., (The), Tiruchi Road, Pudukkottai. Mg. Agents—G. V. Muthuswami Naidu, 4 Red Fields, Coimbatore. Spindles—3,616. Spg. Mstr. —M. R. Bijapurwala. Cotton consumed 88 Candies.

Dhanalakshmi Mills Ltd., (The), Uthukuli Road, Tirupur. Mg. Agents—M. Nanjappa Chettiar & Sons. Office—mill premises. Ph:—Tirupur 71. Spindles—29,500, Looms—201. Products— dhoti, longcloth, towel, grey sheeting for china. Cloth width 38-56 in. Counts—20s to 100s. Spg. Mstr.—R. Rajoo Pillai, Wvg. Mstr.—N. Ramanathan. Cotton consumed 3,229 Candies.

Ghatalah Electric Wvg. Factory (The), Bangalore City. Prop—Dr. M. H. P. Ghatalah, Bangalore City. Looms—12. Wvg. Mstr.—M. J. P. S. Ghatalah.

Gnanambikai Mills Ltd., (The), Coimbatore. Mg. Agents—V. C. Vellingiri Gounder & Bros. Office—mill premises. Ph .— Coimbatore 156. Spindles—11,200. Spg. Mstr.— K. Nalarajan. Cotton consumed 2,091 Candies.

Hemalatha Textiles Ltd , (The), Pedakakani, Guntur Dist. Mg. Agents—Sudursanam Ltd., Office—Ralli House, 320, Linghi Chetty Street, Madras.Ph:—Madras 3411. Spindles—12,000. Counts—20s. Spg. Mstr.—R. S. Pantulu & R. V. Subramanian. Cotton consumed 1,572 Candies.

Janakiram Mills Ltd., Srivilliputhur Road, Rajapalayam. Mg. Agents—Shakthi Ltd., Office—mill premises. Ph:—31. Looms—70. Products—dhoti, towel, shirting. Cloth width 30-50 in.

Janardana Mills Ltd., (The), Uppilipalayam, Singanallur. Agents—G. V. Naidu & Co., Office--mill premises. Ph :—Coimbatore 61. Spindles—20,760. Counts —20s, 36s, 40s, 60s, 80s. Spg. Mstr.—V. G. Rajah. Cotton consumed 2,117 Candies.

Jawahar Mills Ltd., (The), Sevapet-Suramangalam Main Road, Salem Junction. Mg. Agents—Umaiyambika & Co., Office—mill premises. Ph :—Salem

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MADRAS—*Cotton Mills* (*contd.*)

44. Spindles—29,872. Spg. Mstr.—S. N. Babu Chettiar. Cotton consumed 2,768 Candies.

Jayalakshmi Mills Ltd., (The), Uppilipalayam, Singanallur. Ph :—Coimbatore 206. Spindles—10,280, Cotton consumed 962 Candies.

Jayanthi Ramchandrappa Setty Mills Ltd., Rayadrug, Bellary Dt. Mg. Director—J. Venkataramanappa Setty. Office—mill premises. Looms—51. Products—Cotton Cloth - shirting, coating ; silk—shirting, upper cloths and dhoti. Cloth width 27-50 in.

Jayaram Mills Ltd., Rajapalayam, Ramnad Dist. Mg. Agents—Ramco Management Ltd., Office—mill premises. Ph :—63. Spindles—1,720, Looms—81. Cloth width 36—50 in. Wvg. Mstr.—K. A. Narayanan. (Spindles not working)

Kadri Mills (C. B. E) Ltd., Odderpalayam, Singanallur. Mg. Agents—G. Krishna & Co., Office—mill premises. Spindles—13,464. Counts spun—20s, 36s, 40s, 80s. Cotton consumed 1,802 Candies. (Started working from 2.2.50)

Kandan Textiles Ltd, Thiruvottyur, Madras. Mg. Agents—C. S. & Co., 8, Second Line Beach, Madras. Ph: —(office) 2633, (mill) 4309. Looms—76. Products—grey—shirting, dhoti, longcloth, dosuti, towel, saree Etc., Coloured—shirting. Spg. Mstr.—V. Venkateswaran. Wvg. Mstr. M. Swaminath.

Kaleeswarar Mills Ltd, (The), Annuperpalayam, Coimbatore. Agents—A. L. A. R. Arunachalam Chettiar and Dwan Bahadur P. Somasundaram Chettiar. Office—mill premises. Ph :—Coimbatore—59 & 59A. Spindles—50,612, Looms—295. Products—dhoti, longcloth, saree, sheeting, popline Etc., Cloth width 22-66 in. Cotton consumed 5,933 Candies.

Karthikeyan Mills Ltd., (The), Viravanallur, Tirunelveli Dist. Mg. Agents—A. R. M. Velayutha Mudaliar & Co. Ltd., 4/92, Main Road, Ambasamudram, Tirunelveli Dist. Spindles—5,816. Cotton consumed 194 Candies.

Kasthuri Mills Ltd., (The), Irugur, Singanallur. Mg. Agents—C. N. Venkatapathy Naidu & Co. Ltd., Office—mill premises. Ph :—Coimbatore 224. Spindles—14,700. Cotton consumed 1,145 Candies.

Kerala Wvg. Co. P. O. Chovva, N. Malabar Dist. Ry Stn. Connanore South, S. I. Ry. Products—handloom cotton suiting, shirting, furnishing fabric Etc., Cloth width 27-48 in.

Kothari Textiles Ltd., (The), Singanallur, Coimbatore. Mg. Agents—Kothari & Sons. Oriental Bldg., Madras. Ph :—(office) 4431, (mill) 196. Spindles—13,824. Counts—40s, 44s, 50s, 60s, 62s, 80s, 100s. Cotton consumed 1,587 Candies.

Kulapuram Spg. & Wvg. Mills Ltd., (Formerly Kulapuram Wvg. Establishment), P. O. Mandur (via) Payangadi, N. Malabar. Mg. Director—W Aaron. Office—mill premises. Looms—72.

Kumaran Mills Ltd., (The), Puduppalayam, P. O. Idigarai. Mg. Agents—N. Appuswamy Naidu & Co , Ph :—(office) 533, (mill) 98. Spindles—8,016. Counts—30s to 60s. Cotton consumed 750 Candies.

Lakshmi Mills Co. Ltd., (The) No. 1 and 2. Avanashi Road, Coimbatore Mg. Agents—G. Kuppuswamy Naidu & Co , Office—mill premises. Ph :—(office) Coimbatore 18 & 641. Spindles—67,224, Looms—200. Cloth width 40—52 in. Cotton consumed, 7,899 Candies.

Lotus Mills Ltd., Sundarapuram, Podanūr. Mg. Agents—The Lotus Agency Ltd., Office—mill premises. Ph :—Coimbatore 124. Spindles—18,040. Spg. Mstrs.—B Khrishnaswamy & R. Srinivasan. Cotton consumed 3,024 Candies.

Loyal Textile Mills Ltd., Covilpatti. Mg. Agents—Southern Agencies Ltd., 2-21, First Line Beach, Madras. Spindles—24,242, Looms—224. Products—grey—mull, shirting..Cloth width 52 in. Counts—19s to 40s. Spg. Mstr.—R. Ramaswamy Naidu. Cotton consumed 5,079 Candies.

Madras Spg. & Wvg. Mills Co. Ltd, Madras. Secys & Agents—The Khandeish Spg. & Wvg. Mills Co. Ltd., Office—Queen's Road, Fort. Bombay. Ph :—(office) Bombay 32501, (mill) Madras 2041. Spindles—40,164, looms—774. Products—longcloth, shirting, dhoti, drill, chaddar, susis, sheeting. Cloth width 24-70 in. Counts—14s to 50s. (not working)

Madura Mills Co. Ltd., (The), Formerly Tinnevelly Mills Co. Ltd., Ambasamudram. Mgrs—A. & F. Harvey Ltd , Mathurai. Spindles—1,40,736. Counts—up to 32s. Cotton consumed 30,498 Candies.

Madura Mills Co. Ltd., (The), (Old & New), Mathurai. Mgrs—A. & F. Harvey Ltd., Mathurai. Ph :—

MADRAS—*Cotton Mills (contd.)*

(Office) Madurai 250. Spindles—2,30,964, Counts—up to 80s. Cotton consumed 42,085 Candies.

Madura Mills Co. Ltd., (The), (Formerly Coral Mills Co. Ltd.,) Tuticorin. Mgrs—A. & F. Harvey Ltd., Mathurai. Ph :—(office) Tuticorin 6. Spindles—60,380. Counts—12s to 26s. Cotton consumed 18,229 Candies.

Madura Mills Co. Ltd., (The), Mathurai East, Mgrs.—A. & F. Harvey Ltd., Mathurai. Spindles—33,304. Cotton consumed 7,607 Candies.

Mahalakshmi Textile Mills Ltd.. (The), Mathurai. Mg. Agents—S. S. N. Lakshmanan Chettiar & Co. Pasumalai. Ph :—Pasumalai 74. Spindles—22,212. Counts—20s to 40s. Cotton consumed 2,653 Candies.

Malabar Spg. & Wvg. Co. Ltd., (The), Kallai. Mg. Agents—A. L. A. R. Somanadhan Chettiar, Sbri S. Seethai Achi & A. K. T. K. M. Narayanan Namboodripad. Ph :—(office) Calicut 28. Spindles-21,856. Spg. Mstr.—N. Ganesan. Cotton consumed 1,988 Candies.

Mettur Industries Ltd, Mettur Dam. Mg. Agents—W. A Beardsell & Co. Ltd., Post Box No. 7, Madras. Ph :—Madras 4401. Spindles—24,252, Looms—603. Products—grey & bleached mull, and white shirting. Cloth width 40 to 49⅞ in. Spg. Mstr.—P. K. K. Pillai. Wvg. Mstr.—K. V. Raman. Cottan consumed 6,016 Candies.

Palani Andavar Mills Ltd., (The), Dhally Road, Udamalpet, Mg. Agents—Baghyalakshmi & Co. Office—mill premises Ph :—61. Spindles—22,800, Cotton consumed 3,188 Candies.

Pankaja Mills Ltd., (The), Puliakulam, Coimbatore. Mg. Agents—C. S. Ratnasabapathi Mudaliar & Sons. Office—mill premises. Ph :—(office) Coimbatore 94a, (mill) 94. Spindles—27,980, Cotton consumed 3,825 Candies.

Pollachi Bagyalakshmi Mills Ltd.. Pollachi S. I. Rly. Coimbatore Dt., Mg. Directors—S. R. M. Ramaswamy Chettier, S. R. M. Sathppa Chettier. 40, Balagopalapuram, Pollachi. Spindles—8,424. Cotton consumed 158 Candies.

Premier Mills (CBE) Ltd., Udamalpet. Mg. Agents—Narayanaswamy Naidu & Co. Spindles—9,504. Counts spun—cotton & staple fibre yarns—26s, 32s, 36s, 40s, 60s. Cotton consumed 970 Candies.

Pudukotah Textiles Ltd., (The). Namanasamudram, S. I. Rly. Mg. Agents—Emcete & Sons Ltd., Bed Ford House, Vepery, Madras Spindles—12,112, Looms—126. Products—shirting, dhoti, saree, towel, bedspread, gadas, mull Etc., Cloth width 30-50 in. Counts spun—cotton 2/28, staple fibre 40s & 2/40s. Wvg. Mstr.—S. Lakshminarayan. Cotton consumed 1,172 Candies.

Puliccar Mills' Ltd., (The), Tiruchengode. Mg. Agents—V. V. C. R. Viapuri Mudaliar & Sons. Office—mill premises. Spindles—12,900. Spg Mstr.—K. V. Murugesan. Cotton consumed 1,683 Candies.

Radhakrishna Mills Ltd., Peelamedu, Coimbatore. Mg. Agents—A. G. Guruswami Naidu & Co. Office—mill premises Ph :—Peelamedu 15 & 15a Spindles—36,464. Counts staple fibre 30s and 40s ; cotton 26s, 36s, 60s. Cotton consumed 5,365 Candies.

Raja Mills, Mathurai. Prop—M V. P. Kanagavel Nadar. Office—mill premises. Spindles—8,080. Cotton consumed—1,303 Candies.

Rajalakshmi Mills Ltd., (The), Trichy Road, Singanallur Post. Mg. Agents—B. Rangaswamy Naidu & Sons. Office—mill premises. Ph :—Coimbatore 82. Spindles—25,896. Counts—20s to 60s. Cotton consumed 3,657 Candies.

Rajapalayam Mills Ltd., (The), Rajapalayam, Ramnad. Mg. Agents—Ramco Agencies Ltd., Post Box No 1, Rajapalayam. Spindles—18,020. Counts—average 20s. Spg. Mstr.—S. Harihariyer. Cotton consumed 2,400 Candies.

Rayalaseema Mills Ltd.. (The). Rayanagar, Adoni P. O. Bellary Dist. Mg. Agents—The Rayalaseema Development Co., Adoni. Ph :—Adoni 60. Spindles—12,000. Spg. Mstr.—B. S. Yalwar. Cotton consumed 3,439 Candies.

Rajeswari Mills Ltd., Gudiyattam. Mg Agents—Gudiyattam Textiles Ltd.. Ph :—25. Spindles—6,400, Looms—12. Cloth width 27-56 in. Counts—20s to 60s. Cotton consumed 216 Candies.

Sankar Mills, (The), Tirunelveli. Props—S. Sankarnainar Pillai & Sons, Mada Street, Tirunelveli. Looms—101. Products—grey—longcloth, leopard, shirting, gadas, mull. Cloth width 40 to 50 in.

MADRAS—*Cotton Mills (contd.)*

Saroja Mills Ltd., Singanallur. Mg. Agents—Thiagaraja Chetty & Sons Ltd., Office—mill premises Ph :—Coimbatore 157. Spindles—14,256. Counts -- 20s to 60s. Cotton consumed 1,572 Candies.

Somasundaram Mills Ltd. (The), Mall Mill Road, Coimbatore. Mg. Agents—S. Lakshmanan Chettiar. P. O. Box No. 134, Coimbatore. Ph :—Coimbatore 69. Spindles—23,200. Looms—378. Products—grey & bleached—dhoti, saree, shirting. coating, bed sheet, towel. Wvg. Mstr.—R. P. Iyer. Cotton consumed 2,664 Candies.

Soundara Raja Mills Ltd., (The), Power House Road, Dindigul. Mg. Agents—Lakshmana & Co., Office—mill premises. Spindles—12,800. Cotton consumed 1,697 Candies.

Sree Meenakshi Mills Ltd., Thirupparankundram Road, Mathurai. Mg. Agents—Thiagaraja Chetty & Co. Office - mill premises. Ph —Madura 1 & 347. Spindles—37,204. Looms—144. Cloth width 36—52 in. Cotton consumed 6,697 Candies.

Sree Rajendra Mills Ltd., (The), Gandhi Nagar, Salem. Mg. Agents—Thiagaraja Chetty & Co. Ltd., Ph : —45. Spindles—17,200. Cotton consumed 2.704 Candies.

Shree Ramachandra Spg. & Wvg. Mill, Pandalapaka (Ramachandrapur Taluk), East Gadavari Dist. Mg. Agents—Karri Bhami Reddi & Dwrampudi Subbi Reddi. Office—mill premises. Spindles—7,044. Spg. Mstr.—Mohamad Sulaman Sab.

Shree Suryanarayana Spg. & Wvg. Mills, Pandalapaka, East Godavari Dist. Mg. Director—Vundavilli Satyanarayanamurty. Spindles—5,584. Spg. Mstr.—B. Basavaraju. Cotton consumed 489 Candies.

Shree Shunmugar Mills Ltd., Rajapalayam, Ramnad Dist. Mg. Agents—Sree Alagai Ltd., Saraswathi Niwas, Rajapalayam. Spindles—5,424. Counts—20s to 26s. Spg. Mstr.—M. Subbiah Naidu. Cotton consumed 1,160 Candies.

Sri Balasubramania Mills Ltd., (The), Singanallur. Mg. Agents—K. Krishnaswamy Naidu & Brothers. Ph :—(office & mill) Coimbatore 176. Spindles—12,096. Counts—from 32s to 100s. Cotton consumed 1,433 Candies.

Sri Kannapiran Mills Ltd., Sowripalayam, Coimbatore. Mg. Agents—K. Venkataswamy Naidu & Co. 5/21, Gopalapuram. Coimbatore. Ph :—462. Spindles—7,004. Cotton consumed 763 Candies.

Sri Karthikeya Spg. & Wvg. Mills Ltd., Uppilipalayam, Singanallur. Governing Director—G. Ramaswamy Naidu. Office—mill premises. Spindles—10,912. Cotton consumed 1,172 Candies.

Sri Kothandaram Mills. Mathurai. Prop.—S. S. Ramudu Iyer & Brother, 272, Ramnad Road, Mathurai. Ph :—Madura 127. Spindles—4,000. Products—grey—gadas, mull, saree ; bleached—towel. Cloth width 32-52 in. Cotton consumed 898 Candies.

Sri Palamalai Ranganathar Mills Ltd., Perianaickenpalayam P. O., Coimbatore Dist. Mg. Agents—S. K. Rangaswamy Naidu & Co., Office—mill premises. Spindles—6,472. Cotton consumed 946 Candies.

Sri Ramakrishna Mills (Coimbatore) Ltd., Coimbatore. Mg. Agents—S. N. Rangaswami Naidu & Sons. 1/1, Sithaputhur, Coimbatore. Spindles—6,160 (Proposed)

Sri Ramalinga Choodambikai Mills Ltd., (The), 60/10, Uttukuli Road, Tirupur. Mg. Agents—S. Kulli Chettiar & Bros. Office—mill premises. Ph :—38. Spindles—13,124. Counts—36s and 40s. Cotton consumed 2,103 Candies.

Sri Ranga Vilas Gng. Spg. & Wvg. Mills Ltd., (The), Peelamudu, Coimbatore. Mg. Agents—P. S. Govindaswamy Naidu & Sons. Office—mill premises. Ph :—(office) 17. Spindles—28,972, Looms—88. Products—grey -gada, dhoti, bed sheet. Wvg. Mstr.—K. Shanmugham. Cotton consumed 3,118 Candies.

Sri Sarada Mills Ltd., (The), Loganathapuram, Podanur (Coimbatore). Mg Agents—V. S. Sengottaiah & Bros. "Bakthi Villas", Jail Road, Coimbatore. Ph :—(office) Coimbatore 47 & 105, Spindles—20,472, Looms—200 Products—grey—dhoti, chaddar, gadas, longcloth Etc., bleached--dhoti, drill, saree Etc, dyed—towel, shirting, mull, longcloth Etc., Cloth width 32—52 in. Spg. Mstr.—T. N. Sundaram. Wvg. Mstr.—T R. Nagarajam. Cotton consumed 1,543 Candies.

Sri Satyanarayana Spg. Mill, Rajahmundry. Prop—Rao Sahib Vellabhaneni Bapayya Choudary, Rajahmundry. Spindles—5,504 Counts spun 20s. Cotton consumed 486 Candies.

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MADRAS—*Cotton Mills* (*contd.*)

Sri Venkatesa Mills Ltd., (The), Udamalpet. Mg. Agents—G. V. Govindaswami Naidu & Co, Palani Road, Udamalpet, Coimbatore Dist. Ph :—66. Spindles—38,860, Looms—268. Products—grey—mull. Cotton consumed 3,354 Candies.

Thaikesar Alai (Branch of Shree Meenakshi Mills Ltd, Madura), Manaparai Post Ph :—Tiruchirapalli 97. Mg. Agents—Thiagaraja Chetty & Co., Madras. Spindles—21,600. Counts—20s to 40s. Cotton consumed 3,103 Candies.

Thirumagal Mills Ltd, (The), Gudiyattam, N. A. Dist. Mg. Agents—Thirumal & Co. Ltd., Office—mill premises. Ph :—26. Spindles—14,500. Cotton consumed 1,387 Candies.

Thungabhadra Spg. & Wvg. Mills Ltd, Kurnool. Mg. Agents—Royalseema Industries Ltd., 4, Griffith Road, Thyagarayanagar, Madras Ph :—88428. Spindles—12,000.

Tirumurthi Mills Ltd., (The), Bodipatti, Udamalpet. Mg Agents—Jayalakshmi & Co., Office—mill premises. Spindles—16,400. Counts—16s, 20s, 36s, 40s, 60s. Cotton consumed 1,332 Candies.

Trichinopoly Mills Ltd., (The), Ramjeenagar, Trichinopoly. Mg. Agents—Mooljee Ranjee & Sons. Office—mill premises. Ph :—Tiruchirappalli 98 & 98a. Spindles—16,000. Cotton consumed 1,646 Candies.

Vasanta Mills Ltd., (The), Singanallur. Mg. Agents—R. K. Shanmukham Chetty & Bros. Office—mill premises. Ph :—(office), Coimbatore 25, (mill) 25a. Spindles—33,704, Looms—270. Products—grey—dhoti, mull, longcloth, terry towel, sheeting; bleached—mull, longcloth. Cloth width 33-60 in. Spg. Mstr.—M. Ramaswamy, Wvg. Mstr.—M. R. Shetty. Cotton consumed 4,379 Candies.

Vijaya Kumar Mills Ltd., Kalayamputhur P. O Palni S. I. Ry. Mg. Agents—R. Guruswamy Naidu & Co Office—mill premises. Spindles—13,440. Cotton consumed 234 Candies.

Vijayalakshmi Mills Ltd., (The), Kuniamuthur, Coimbatore. Mg. Agents—Gupta & Co. Ltd., Office—mill premises. Ph :—Coimbatore 149. Spindles—14,552. Spg. Mstr.—S. V. Chidambaram. Cotton consumed 1,259 Candies.

MADHYA BHARAT

Binod Mills Co. Ltd., (The), Ujjain. Secys Treasurers & Agents—Binodiram Balchand. Spindles 35,968. Looms—8,60. Products—saree, malmal, shirting, fancies, dhoti, coating, checks, chintz, mazries etc., Cloth width—32-72 in. Counts—9s, 14s, 16s, 18s, 20s, 26s, 30s, 40s, 60s. Spg. Mstr—S. Patel, Wvg. Mstr.—N. R. Naik.

Deepchand Mills, (The), Ujjain. Props :—The Binod Mills Co. Ltd., Spindles—20,176, Looms-480. Products—saree, cotton tapes, ring spindle tape, shirting, dhoti, chaddar, kashmires etc., Cloth width—24-72 in. Counts—9s, 14s, 16s, 18s, 22s, 26s. 30s. Spg. Mstr.—Phiroz R. Gandhi, Wvg. Mstr.—D. R. Karjatkar. Cotton consumed—10,852 Candies. (Including The Binod Mills Ltd.)

Hira Mills Ltd., (The), Ujjain. Agents—Sir Sapurchand Hukumchand & Co., Spindles—27,540, Looms—864. Products—coating, mazri cloth; grey—drills, dosuties, satins, longcloth, shirtings; Bleached-drills, mulmul, saree, dhoti, twill etc., Dyed-Italian twill, longcloth, dorias. Counts—14s, 16s, 20s, 22s, 24s, 30s, 40s, 50s 60s, 80s. Spg. Mstr.—T. H. Taylor, Wvg. Mstr.—J. J. Mistry. Cotton consumed—7,904 Candies.

Hukamchand Mills Ltd., (The), Indore. Secys. Treasurers & Agents—Sir Hukamchand & Mannalal Co., Ph :—Indore 6095. Spindles—44,388, Looms—1,488. Products—saree, tent-cloth, jeans, cambrics, khadi, dhoti, lawns etc., Cloth width 27-72 in. Counts—1s, 3s, 4s, 6s, 10s, 12s, 13s, 14s, 18s, 20s, 24s, 40s, 44s. Spg. Mstr.—R. N. Kotwal. Cotton consumed 14,982 Candies.

Indore-Malwa United Mills Ltd., (The), Indore city. Mg. Agents—Govindram Seksaria (Indore), 139,

MADHYA BHARAT—*Cotton Mills (contd.)*

Medows Street, Fort, Bombay. Spindles—50,020, Looms—1,420. Products—grey—dhoti, dosuti, chaddar,' longcloth, markin, satin, sheeting Etc., Bleached—dosuti, dobby chaddar, drill, duster, longcloth, shirting Etc., Dyed—sushi, cotton blanket, coating, drill, longcloth, shirting Etc., Cloth width – 16-90 in. Spg. Mstr.—Sorab Dinshaw, Wvg. Mstr.—V. V. Sonalkar. Cotton consumed—16,525 Candies.

Jiyajeerao Cotton Mills Ltd., (The), Near Morar Road, Gwalior. Mg. Agents—Birla Bros. (Gwalior) Ltd., Jiyajeerao Mills, Gwalior. Ph :—Gwalior 2162. Spindles—50,376, Looms—1,456. Products—saree, dhoti, lathas ; grey, dyed & bleached—towel, sujni, twill, coating, blanket, shirting Etc., Cloth width 25-64 in. Spg. Mstr.—D. D. Shah, Wvg. Mstr.—N. G. Desai. Cotton consumed 19,568 Candies.

Kalyanmal Mills Ltd., (The), Indore. Mg. Agents—Tillo-okchand Kalyanmal & Co., Ph:—Indore 6081. Spindles 36,412, Looms—956. Products – grey—saree, sheeting, niwar, canvas, dhoti, calico, twill Etc., Dyed– crepe, dosuties, mazris, water proof canvas Etc., Printed—chintz. Spg. Mstr.—C. L. Mundra, Wvg. Supt.—J. W. Barnes. Cotton consumed 10,987 Candies.

Mandsaur Textile Mills, (The), Mandsaur, Gwalior. Prop. —Mr. Laxminarayan. Spindles 10,048, Looms—110. Products—grey cotton yarn.

Motilal Agarwal Mills Ltd., (The), Morar Road, Gwalior. Spindles—12,500. Products—grey cotton yarn. Spg. Mstr.—R. G. Sawant. Cotton consumed 2,354 Candies.

Nandlal Bhandari Mills Ltd., (The), Indore. Mg. Agents —Nandlal Bhandari & Sons Ltd., Spindles 28,008, Looms—771. Products—saree, longcloth, satin, shirting, dhoti, dosuti, drill Etc., Cloth width—28-64 in. Counts—1s to 18s. Spg .Mstr.—J. Desai, Wvg. Mstr.—F. O. Baron. Cotton consumed—11,523 Candies.

Nazarali Mills (The K. S.), Ujjain, Gwalior State. Mg. Prop.—Seth Mohammadhussin Bhai. Spindles—17,288, Looms—379. Products—grey—satin ; Bleached—dhoti, haraks ; Dyed—dorias, dyeing soits. Cloth width—28-60 in. Counts—14s, 18s, 21s. Spg. Mstr.—V. V. Bondale, Wvg. Mstr.—L. K. Bakshi. Cotton consumed 2,475 Candies.

New Bhopal Textiles Ltd., Bhopal. Mg. Agents—Sir J. P. Srivastava & Sons (Bhopal) Ltd., Spindles—14,112, Looms—400. Products—grey—sheeting & shirtings. Cloth width—29 60 in. Counts—10s to 30s. Cotton consumed 6,574 Candies.

Rai Bahadur Kanhaiyalal Bhandari Mills. Malgodown Road, Indore. Agents—Nandlal Bhandari & Sons. Ph :—Indore 101. Spindles– 15,696, Looms—351. (Not working since 1. 12. 48).

Rajkumar Mills Ltd., (The), Shilnath Camp Road, Indore. Agents—Sir Sarupchand Hukamchand & Co. Ph :—Indore 403. Spindles—22,368, Looms—609. Products—curtain cloth, chintz, drill, fancies, choles, shirting, coating, tapestries, chaddar, paramattas, towel, voil Etc., Cloth width 26-68 in. Counts—14s to 50s & 1½s to 6½s waste. Spg. Supt.—V. P. Iyer, Wvg. Mstr.—D. S. Deshpande. Cotton consumed 7,271 Candies.

Shree Sajjan Mills, Ltd., (The), Ratlam. Agents—Gopaldas Liladhar & Co. Ltd., Ratlam. Ph :—Ratlam 10. Spindles—15,824, Looms—440. Products—grey saree, drill, dhoti, mull, longcloth, shirting Etc., Cloth width—26 63 in. Spg. Mstr.—V. S. Pradhan, Wvg. Mstr.—D. M. Nadkarni. Cotton consumed—4,809 Candies.

Shri Maharani Mahalsabai Cotton Mills Co. Ltd., Dewas Junior. Agents—Seth Dwarkadas Dharamsey. Spindles—11,776, Looms—192. Cloth width 36 in. Counts—14s, 16s, 18s, 20s. Cotton consumed—2,093 Candies.

Swadeshi Cotton & Flour Mills Ltd., (The), Silnath Camp, Indore. Mg. Agents—Jaganath Narayan & Co., Ph :—Indore 486. Spindles—22,316, Looms—364. Products—grey—satin, dyed Cloth, longcloth ; Bleached—haraks, dhoti, mulmul, saree; Dyed—cashmeres, twill, poplin, choles. Cloth width—30-60 in. Counts—12s, 18s, 24s. Spg. Mstr.—S. W. Shiveshwarkar, Wvg. Mstr.—A. M. Shah. Cotton consumed—4,709 Candies.

MADHYA PRADESH

Bengal-Nagpur Cotton Mills Ltd.. Rajnandgaon. Mg. Agents—Shaw Wallace & Co. Ltd., 4, Bankshall Street, Calcutta. Ph :—City 5601—4 & 3238. Spindles—31,476, Looms—766. Products—drill, dhoti, saree, shirting Etc., Cloth width 22—60 in. Spg. Mstr.—F. Chadwick, Wvg. Mstr.—J. O. Gajaria. Cotton consumed 6,721 Candies.

Berar Mfg. Co. Ltd., (The), Badnora. Agents—Kasturchand Dadabhoy & Co , 24B, Raja Bahadur Mansion, Hamam St., Fort, Bombay. Ph :—Bombay 20314. Spindles—21,384, Looms—369. Products—grey—chaddar, dhoti, dosuti, drill, khadi, sushis, shirting ; bleached—drill, shirting. Cloth width 27-84 in. Counts—18s to 28s. Spg. Mstr.—N. R. Chatterjee, Wvg. Mstr.—K. K. Desai. Cotton consumed 979 Candies

Burhanpur Tapti Mill Ltd., Burhanpur . Agents—P. N. Mehta & Sons, Cook's Bldg., 324 Hornby Road, Fort, Bombay. Ph :—Bombay 21288 & 31861. Spindles—29,512. Looms—730. Products—coating, shirting, sheeting, saree, mull, dhoti Etc., Cloth width 24—60 in. Counts—14s to 40s. Spg. Mstr.—I. B. Dutt. Cotton consumed 7,138 Candies.

Central India Spg. Wvg. & Mfg. Co Ltd., (The), Nagpur. Mg. Agents—Tata Industries Ltd., Bombay House, 24, Bruce Street, Fort, Bombay. Ph :—(office) Bombay 26041, (mill) Nagpur 214. Spindles—1,15,188, Looms—2,168. Products—grey—dhoti, saree, coating, drill, mull, shirting Etc., bleached—twill, drill, longcloth, shirting, flannelettes, towel, handkerchief, charas Etc., dyed—shirting, drill, twill, chaddar Etc., printed—chintz, voile Etc., Cloth width 22-84 in. Counts—4s to 50s, 60s to 90s. Spg. Mstr.—F. N. Dastur, Wvg. Mstrs.—B. B. Desai & H. S. Tata. Cotton consumed 18,582 Candies.

Model Mills Nagpur, Ltd., (The), Nagpur. Agents—Bansilal Abirchand Dadabhoy & Co., Office—mill premises. Ph :—(mill) Nagpur 2017. Spindles—52,408, Looms—952. Products—grey—saree, dhoti, chaddar, khadi, salitas, dosuti, longcloth ; bleached—plain and fancy dhoti, saree, longcloth Etc., dyed—twill, drill, pagri cloth, chadder Etc., Cloth width 22½-80 in. Counts—single and double from 4s to 40s. Wvg. Mstr.—A. F. Bathena. Cotton consumed 10,929 Candies.

Pulgaon Cotton Mills Ltd., (The), Pulgaon. Mg. Agents—Hardayal Sons, 59, Apollo Street, Fort, Bombay. Ph :—Pulgaon 3 & 5. Spindles—17,596, Looms—246. Products—grey—shirting, drill, sheeting, longcloth, jacquard chaddar ; bleached—bed sheet, chaddar, longcloth, sheeting, saree, dhoti, drill. Cloth width 24-90 in. Counts—4s to 24s. Wvg. Mstr.—W. A. Deshmukh. Cotton consumed 4,637 Candies.

Rai Bahadur Bansilal Abirchand Spg. & Wvg. Mills, Hinganghat. Spindles—31,600, Looms—396. Products—chaddar, dhoti, drill, printers, sheeting, shirting, towel ; bleached—dhoti, longcloth, khadi. Cloth width 32-80 in. Counts—1s to 40s. Spg. Mstr.—S. S. Satam, Wvg. Mstr.—G. N. Byas. Cotton consumed 4,190 Candies.

R. S. Reckchand Gopaldas Mohota Spg. & Wvg. Mills Ltd., (The), Akola. Mg. Agents—Bulakidas Mohota & Co. Ltd., Ph :—Akola 34. Spindles—21,876, Looms—466. Products—chaddar, dhoti, drill, khadi, longcloth, twill. Cloth width 28 62 in. Counts—2s to 24s. Spg. Mstr.—G. V. Pitre, Wvg. Mstr.—G. B. Sahasrabudhe. Cotton consumed 6,470 Candies.

Rai Saheb Rekhchand Mohota Spg. & Wvg. Mills Ltd., Hinganghat, Dist. Wardha. Mg. Director—Seth Mathurdas Mohota. Office—mill premises. Spindles—22,850, Looms—412. Products—chaddar, dhoti, towel, khadi, longcloth Etc., dyed & printed—longcloth, dhoti. Cloth width 24-72 in. Spg. Mstr.—R. M. Basu, Wvg. Mstr.—D. A. Pardhey. Cotton consumed 3,888 Candies.

Savatram Ramprasad Mills Co. Ltd., (The), Akola. Mg. Agents—Savatram Sons Ltd., Office—mill premises. Ph :—Akola 52. Spindles—13,096, Looms—317. Products—chaddar, dhoti, drill. Cloth width 28-66 in. Counts—2s to 20s. Spg. Mstr.—

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MADHYA PRADESH—*Cotton Mills (contd.)*

J. N. Gaheiwar, Wvg. Mstr.—P. B. Desai. Cotton consumed 3,694 Candies.

Vidarbha Mills (Berar) Ltd., (The), Ellichpur. Mg. Agents—Deshmukh & Co., Office—mill premises. Spindles—12,444, Looms—347. Products—grey-dhoti, saree, longcloth, shirting, bed ticking; bleached—dhoti, saree, longcloth Etc., dyed-longcloth. Cloth width 27 55 in. Spg. Mstr.—M. B. Sawde, Wvg. Mstr.—V. B. Vaidya. Cotton consumed 3,133 Candies.

MYSORE

Bangalore Woollen Cotton & Silk Mills Co. Ltd., (The), Agraram Road, Bangalore City. Mg. Agents—Binny & Co (Madras) Ltd., 7, Armenian St. Madras. Ph :—(office) Bangalore City 2037, (mill) 2038 & 2157. Spindles—40,068, Looms—1,085. Cotton consumed 9,729 Candies.

Davangere Cotton Mills Ltd., (The), Davangere. Mg. Agents—R. Hanumanthappa & Son, Hanumanthappa Bldg., Chittaldrug Road, Davangere. Spindles—21,328. Cotton consumed 4,596 Candies.

Kapila Textile Mills Ltd., Nanjandgud Town. Mg. Agents- C. P. C. & Co, Gandhi Square, Mysore. Ph :—Mysore 748. Spindles—15,184. Products—shirting, coating, longcloth, drill, towel Etc., Counts spun—16s to 40s. Cotton consumed 140 Candies. (Started working from 31. 3. 51)

Minerva Mills Ltd., (The), Magadi Road, Bangalore. Mg. Agents—N. Sirur & Co. Ltd., 70, Forbes Street, Fort, Bombay. Ph :—(office) Bombay 22947, (mill) Bangalore 2040. Spindles—36,416, Looms—551. Products—longcloth, drill, tussores, dhoti, towel, shirting, dosuti Etc., Cloth Width 26-70 in. Counts—10s to 40s. Spg Mstr.—G. M. Mudbidri. Cotton consumed 8,094 Candies.

Mysore Spg. & Mfg. Co Ltd., (The), Bangalore. Mg. Agents—N. Sirur & Co. Ltd., 70, Forbes Street, Fort, Bombay. Ph :—(office) Bombay 22947, (mill) Bangalore 2010. Spindles—49,696, Looms—500. Products—longcloth, bedsheet, dhoti, saree, suiting, shirting, drill, twill Etc., Cloth width 26-70 in. Counts—10s to 40s. Spg. Mstr.—K. Sitarama Iyer, Wvg. Mstr.—P. D. Nagarkar. Cotton consumed 9,973 Candies.

Shree Suryodaya Mills Ltd, Yesvantpur, Bangalore. Mg. Director-R. Rama Setty. Ph :—2381. Looms—73. Products—grey—longcloth, dhoti, bed-spread. Cloth width 27-54 in. Wvg. Mstr.—P. S Narayanaswami.

Shree Ganesar Textile Mills Ltd., Davangere. Mg. Agents—G. Mahadevappa & Sons Spindles—17,000. Spg. Mstr.—S. R. Armugan Cotton consumed 980 Candies.

Sri Shankara Textile Mills Ltd., Davangere. Mg. Agents—Murugharajendraf & Co, P. O. Box No. 2, Davangere. Spindles—18,000. Cotton consumed 2,415 Candies.

Sri Krishna Spg. & Wvg. Mills Ltd., Subramanyapura, Kengeri Post. Mg. Agents—Yadalam Subbiah Setty & Sons. Post Box No. 24, Bangalore City. Ph :—(office) 2058, (mill) 2294. Looms—174. Products—shirting, suiting. Cloth width 27-54 in. Counts—30s to 40s. Wvg. Mstr.—B. N. K. Iyengar.

Sri Rama Wvg. Shed, Hardinge Road, Basauangudi Post, Bangalore. Products—cotton—grey & bleached—dhoti; dyed—saree.

Sri Krishnarajendra Mills Ltd., (The), Bangalore Road, Mysore. Mg. Director—H. Nanjundia. Office—mill premises. Ph :—(office) 666 & 872. Spindles—25,200, Looms—285. Products—dhoti, shirting, coating, tussore, sheeting, towel, long.

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MYSORE —*Cotton Mills* (*contd.*)

cloth Ect., Hosiery—banian, drawer, pullover, Etc., Cloth width 27-54 in. Counts—8s to 50s, 2/42s, 2/20s, 2/28s. Spg. Mstr—M. Jagannath, Wvg. Mstr.—G. M. Fhansalkar. Cotton consumed 4,536 Candies.

T. R. Mills, (The), Chamarajpet, Bangalore City. Owner—D. R. Madhava Krishnaiya. Office—mill premises. Ph :—(office & mill) Bangalore 2275. Looms—208. Products shirting, suiting. Cloth width 27-48 in. Wvg. Mstr.—M. Venkataramanaiah.

EAST PUNJAB

Ajudhia Textile Mills Ltd., (The), P. O. Ajudhia Mills, Delhi. Mg. Agents—Seth Brothers Ltd., Regal Bldg., Parliamentary Street, New Delhi. Ph :—(mill) 6511, (office) 7891. Looms—307. Products—bedsheet, dhoti, shirting, dosuti, longcloth Etc., Cloth width up to 60 in.

Amritsar Rayon & Silk Mills Ltd.. Grand Trunk Road, opposite Terminal Tax Barrier, No. 1, Amritsar. Mg. Director—Lala Shorilal Kapur. Office address—P. B. No .20, Amritsar. Ph :—(office) 562, (mill) 562A. Spindles—2,164, Looms—158. Products—grey—latha, dosuti ; bleached—bedford, cord, drill, jean, markin, poplin ; dyed—lining ; printed—chintz, silk—satin, ninon, georgette, tabby. Cloth width 27—56 in. Counts—up to 50s. Spg Mstr.—S. Daulat Singh. Wvg. Mstr.—Ram Parkash.

Birla Cotton Spg. & Wvg. Mills Ltd, (The), Subzimundi, Delhi. Mg. Agents—Bir'a Brothers Ltd., 8 Royal Exchange Place, Calcutta. Ph :—(mill) Delhi 5991—3. Spindles—39,896, Looms—998. Products—saree, dhoti, shirting, coating, prints, towels Etc., Cloth width 27—75 in. Counts—18s, 22s, 28s. Spg. Mstr.—S. Narain Swami, Wvg. Mstr.—S. N. Joshi. Cotton consumed—13,718 Candies.

Dadyalbagh Spg. & Wvg. Mills, (The), Putlighar, G. T. Road, Amritsar. Props—Sir Sahabji Maharaj Mills Ltd., Office—mill premises. Ph :—Amritsar 715. Looms—252. Products—chaddar, dosuties, longcloth, khadi ; artificial silk fabrics—shirting, suiting ; woollen cloth—tweed, suiting Etc., Cloth width 22—60 in.

Delhi Cloth & General Mills Co. Ltd., (The), Rohtak Road, Delhi. Ph :—Delhi 5914 (4 lines). Spindles—75,604, Looms—1,830. Products—shirting, mull, handkerchief, napkin. Cloth width 32—92 in. Counts—12s to 100s. Spg. Mstr.—S. N. Ganguli, Wvg. Mstr.—T. R Alurkar. Cotton consumed 25,598 Candies.

Goenka Cotton Spg. & Wvg. Mills Co. Ltd.. G. T. Road, Delhi. Mg. Agents—Parsram Harnandrai, Khatra Tobacco, Khari Baoli, Delhi. Looms—307. (closed since March 1927).

Lakshmi Chand Jaipuria Spg. & Wvg. Mills, (The), Subzimundi, Delhi. Owner—R. S. Seth Ram Cower Jaipuria. Office—mill premises. Ph :—Delhi 6207. Spindles—19,500, Looms—226. Cloth width—30 52 in. Counts—up to 30s. Spg. Mstr.—D. B. Desai, Wvg. Mstr.—S. K. Mazumdar. Cotton consumed 1,269 Candies

Mahabir Cotton Spg. & Wvg Co Ltd., Subzimandi, Delhi. Ph :—6207. Spindles—11,772, Looms—235. Products—chaddar, dosuties, standard cloth. Cloth width 26—56 in. Spg. Mstr.—Dinker Rao B. Desai, Wvg Mstr.—S K. Mazumdar.

Punjab Cloth Mills Ltd.. (The), Bhiwani. Mg. Director—Mr. Radhakrishen Puranmal. Office—mill premises. Ph :—(mill) Bhiwani 14. Spindles—11,000, Looms—255 Products—grey—latha, dhoti, shirting ; bleached—latha ; dyed—latha. Cloth width 27—55 in. Counts—18s and 36s warp and 18s weft. Spg. Mstr.—W. R. Karnick, Wvg. Mstr.—D. D. Mehta. Cotton consumed 2,492 Candies.

EAST PUNJAB—*Cotton Mills (contd.)*

Seth Spg Ltd., (The), (formerly Amritsar Spg. Mills), G. T. Road, Amritsar. Mg. Agents - Chunilal Seth & Bros. Ltd., Office Mill premises. Ph :—684. Spindles—4,648, Looms -39. Spg. Mstr.—D. R. Gomey. Cotton consumed 224 Candies.

Swatantra Bharat Mills, Najafgarh Road, Delhi. Props —The Delhi Cloth & General Mills Co. Ltd., Office —mill premises. Ph :—40008. Spindles—25,964, Looms—607. Products—sheeting, mazri cloth, longcloth, shirting. Cloth width 24—48 in. Counts —9s to 40s. Spg. Mstr.—C. S. Jain, Wvg. Mstr.— P. C. Singal.

Technological Institute of Textiles, (formerly Bhiwani Cloth Mills Ltd), Bhiwani. Agents—Birla Education Trust, Pilani. Spindles—15,572, Looms—426. Products—dhoti, sheeting, doria, mulmul, lathas ; grey—dhoti, saree ; bleached—poplin ; dyed —lathas : printed—chintz. Cloth width 24—62 in. Counts—18s and 22s warp, 22s and 28s weft. Spg. Mstr.—R. C. Sharma, Wvg. Mstr.—D. C. Guha. Cotton consumed 4,845 Candies.

PONDICHERRY

Anglo French Textile Co. Ltd., (The), Rodier Mill, Pondicherry. Mg. Agents Best & Co. (Pondicherry) Societe Anonyme, Pondicherry. Spindles—44,256, Looms—1,000. Products—grey, bleached and dyed—drill, sheeting, shirting, dhoti. Cloth width 26¾-47½ in. Spg. Mstr.—J Wild, Wvg. Mstr.—A. Bentley. Cotton consumed 9,719 Candies.

Savana Societe Anonymede Filature Tissage Mecanique, Savana (Inde-francaise), Pondicherry. Spindles—22,968, Looms—675. Spg Mstr.—C. Georger, Wvg Mstr — M. Fuchs. Cotton consumed 6,207 Candies.

Sri Bharathi Mills S. A., (formerly Establishment Textile De Modeliaarpeth S. A.), Modeliarpet, Pondicherry. Mg. Agents—Etablishment Textile de Modeliarpeth, Post Box No 10, Pondicherry. Ph : – Modeliarpeth 73 & 73a. Spindles—16,316, Looms —316. Cloth width 25-54 in. Counts—2s to 30s. Spg. Mstr.—J. Sethuraman, Wvg. Mstr —V. Rajagopalan Cotton consumed 1,753 Candies.

RAJASTHAN, AJMER & PEPSU

Edward Mills Co. Ltd., (The), Beawar. Mg. Director— R. S. Seth Motilalji Raniwala, Diggi Street, Beawar. Ph :—(office) Beawar 46, (mill) 26. Spindles—20,488, Looms—376. Products—dhoti, dosuties, longcloth, khadi, saree, mazri cloth, shirting, sushis Ect., Cloth width 20-62 in Counts—8s,9s, 10s, 12s, 13s, 14s, 16s, 20s, 30s. Spg. Mstr.—S. R. Daruwalla, Wvg. Mstr.—G. A. Sohoni. Cotton consumed 5,388 Candies.

Jagatjit Cotton Textile Mills Ltd., Phagwara (Pepsu). Agents—Karam Chand Thapar & Bros. Ltd., 5, Royal Exchange Place, Calcutta. Spindles—17,856, Looms—390. Cotton consumed—1,207 candies.

Jaipur Spg. & Wvg. Mills Ltd., Mg. Agents—Shree Laxmi Traders Ltd., Jobner Baug. Jaipur. Spindles—15,576. Products—shirting, coating, sushis—bleached & coloured. Cloth width 32-51 in. Spg. Mstr.—S. Sharma. Cotton consumed 3,729 Candies.

Kotah Textiles Ltd., Bhimgunj, Kotah Jn. Mg. Agents —Motiram Chhangomal Rupani. Office—mill

RAJASTHAN, AJMER & PEPSU—
Cotton Mills (contd)

Premises. Spindles—7,590, Looms—160. (Not working since May, 1949)

Krishna Mills Ltd , (The), Beawar. Mg. Agents—Thakurdas Khinvraj & Co., Ph :—(office) City 41, (mill) 27. Spindles—18,268, Looms—336 Products—coarse cloth, Khadi, longcloth, dhoti, chaddar Etc., Cloth width 26-66 in. Counts—4½s, 6s, 8s, 12s, 14s, 16s, 20s, 30s Cotton consumed 7,485 Candies.

Mahalakshmi Mills Co. Ltd , (The), Beawar Mg. Derector—Seth Mukund Dasji Rathi. Office—mill premises. Ph :— (office) 42, (mill) 32. Spindles—13,728, Looms—416. Products—khadi, dhoti, longcloth Etc., Cloth width 24-72 in Counts—8s, 13s, 19s, 22s, 24s, 30s. Spg. Mstr.—D. J. Taraporowala, Wvg Mstr.—V. D. Khanna Cotton consumed 4,054 Candies.

Maharajah Kishengarh Mills Ltd , (The), Madanganj, Kishengarh. Mg. Agents—Soni Industrial Agencies Ltd., Office—mill premises. Ph :—(office) 180b. Spindles—26,650, Looms—392. Products—chaddar, coating, dhoti, longcloth, saree, shirting, towel Etc., Cloth width 40-64 in. Spg. Mstr.—N. D. Shah, Wvg. Mstr.- G R. Maney. Cotton consumed 4,850 Candies.

Maharajah Sri Umaid Mills Ltd., Pali-Marwar. Agents—The Shree Krishna Agency Ltd , Office—mill premises. Ph :—5. Spindles—17,560, Looms—434 Products—chaddar, dhoti, lathas, sheeting, saree. Cloth width 25—68 in. Counts—11s warp, 11s to 20s, 8s reeling. Spg. Mstr.—Chandrakant Seth, Wvg. Mstr —N R. Falnikar. Cotton consumed 11,480 Candies.

Meawar Textiles Mills Ltd., (The), Bhilwara (Rajasthan). Mg. Agents—Sobhag Agencies Ltd , Office—mill premises. Spindles—7,812, Looms—250. Products—dhoti, saree, khadi, satin, sheeting Etc., Cloth width—22—70 in. Counts—10s to 20s warp. Spg. Matr —Kantilal D. Makim, Wvg Mstr.—N. R. Desai. Cotton consumed 5,156 Candies.

Shree Bijay Cotton Mills Ltd., Bijaynagar Mg. Director Seth Raghunath Singh Manssinghka. Spindles—13,720, Looms 310. Products—grey, bleached & dyed—chaddar, khadi, satin Etc., Cloth width 18—66 in. Spg. Mstr.- Ram Prasad Yadav, Wvg. Mstr. -R. J. Bhatt Cotton consumed—4,221 Candies.

Shree Mahadeo Cotton Mills Ltd., Bhilwara (Rajasthan). Mg. Director- Seth Sanwarmal Mansingka. Office—mill premises. Spindles—4,540, Looms—45. (Not working Since 15th March, 1949).

Shree Sadul Textiles Ltd., Sri Ganganagar, Rajasthan. Mg. Agents J. P. Srivastava & Sons (Bikaner) Ltd , Office—Mill premises. Sdindles—15,296. Cotton consumed—109 Candies.

TRAVANCORE & COCHIN

A. D. Cotton Mills Ltd., (The), Quilon (S. I. Rly). Mg. Agents—Girdharlal Amratlal & Co., Office—mill premises. Ph :—Quilon 361. Spindles—12,000, Looms—300. Products—poplin, suiting, towel, napkin, bedsheet Etc., bleached—dhoti, saree, longcloth, coating, shirting ; dyed—longcloth, coating, shirting. Cotton consumed 1,635 Candies.

Alagappa Textiles (Cochin) Ltd., Alagappa Nagar, Cochin State. Mg. Agents—Ramal & Co. Ltd., Alagappa Nagar. Ph :—Trichur 40. Spindles—44,306. Counts—ranging from 20s to 80s. Cotton consumed 3,764 Candies.

Alwaye Textiles Ltd., Alwaye. Mg. Agents—Shankar Agencies Ltd., Coimbatore. Office—mill

TRAVANCORE & COCHIN—
Cotton Mills (contd.)

premises. Ph :—26. Spindles—6,504, Looms—10. Spg. Mstr.—M. Srivastava. (Not working).

Asoka Textile Ltd , Alwaye. Managed by the Board of Directors, Alagappanagar P. O. Spindles—8,640. Cotton consumed—248 Candies. (Started working from 1. 5. 51).

Balarama Varma Textiles Ltd., Shencottah. Mg. Agents—Karayalar & Rangaswamy Naidu Sons Co., Spindles—11,904. Counts—20s to 60s warp yarn. Cotton consumed 873 Candies.

Cochin Mahalakshmi Cotton Mills Ltd., (The), Mulakunnathukavu, (near Trichur), Cochin State Office—mill premises. Mg. Agents—The Cochin Agencies & Indnstries Ltd , Ph :—Trichur 154. Spindles—3,000. Counts—20s to 40s. Spg. Mstr.—T. B. Sitarama Iyer. Cotton consumed 350 Candies.

Sitaram Spg. & Wvg. Mills Ltd., (The), Pushpagiri, Trichur P. O. Cochin State. Mg. Agents—T. R. Anatharama Iyer & Bros. Ltd., Ph :—Trichur 35. Spindles—17,216, Looms—416. Products—grey—dhoti, longcloth Etc., bleached—towel, saree mul, shirting Etc., Cloth width 32-60 in. Counts—20s, 24s, 30s, 40s, 60s. Spg. Mstr.—P. Sankarakutty Menon, Wvg. Mstr —C. A. Thirumudisamy Pillay. Cotton consumed 3,114 Candies

Vanaja Textiles Ltd., Trichur, Trichur Post., Cochin State. Mg. Agents—Mayura Co. Ltd., Trichur. Office—"Umalayam", Kuruppam Road, Trichur. Spindles—8,400. Cotton consumed 41 Candies. (Started working from 1 8. 51).

Vijayamohini Mills Ltd., Thirumalal Poojapuri, Trivandrum. Mg. Agents—Binsuram & Co., Office—mill premises Spindles—9,360. Counts—20s grey single and double yarns. Cotton consumed 1,903 Candies.

UTTAR PRADESH

Atherton Mills, (The), Anwarganj, Kanpur. Props :—Atherton West & Co. Ltd., Ph :—Kanpur 2390. Spindles—42,352, Looms— 898. Products—dhoti, saree, sheeting, shirting Counts—15s to 40s. Spg. Mstr.—W. Bowling, Wvg. Mstr.—A. Greenwood. Cotton consumed 6,878 Candies.

Benares Cotton & Silk Mills Ltd., (The), Chowkaghat, Benares Cantt., Mg. Agents—Sital Prasad Kharag Prasad. Ph :—(office) 222, (mill) 57. Spindles—23,112, Looms—503. Products—shirting, longcloth, drill, dhoti, saree Etc.,bleached—longcloth,markin, sheeting, dhoti, saree. Cloth width 28-66 in. Counts—20s, 24s, 26s, 32s, 2/40s, 6s, 8s, 2s. Spg. Mstr.—N. B. Patel, Wvg. Mstr.—C. Singh. Cotton consumed 1,066 Candies.

Bijli Cotton Mills Ltd., (The), Mendu Road, Hathras. Mg Agents—N. K. Ltd., Ph :—(office) Hathras 17. Spindles—13 492, Looms—20. Counts—36s to 75s. Spg. Mstr.—M. S. Pradhan. Cotton consumed 6,013 Candies.

Cawnpore Textiles Ltd., Cooperganj, Kanpur. Mg. Agents—Begg Sutherland & Co. Ltd., Ph :—(office) Kanpur 2211. Spindles—27,388. Products—bazar sheeting and hosiery. Cloth width 24-46 in.

UTTAR PRADESH—*Cotton Mills* (*cntd.*)

Counts—12s to 30s. Spg. Mstr.—D. J. Sethna, Wvg. Mstr.—A. F. Khory. Cotton consumed 6,036 Candies.

Dayalbagh Textile Mills Ltd., Dayalbagh, Agra. Office—mill premises. Ph :— Agra 730. Looms—72. Products—Cotton and mercerised cloth—dhoti, towel, shirting, saree, bedsheet, tablecloth, handkerchief, chaddar, coating Etc., silk—suiting, shirting, saree Etc., Cloth width 27-63 in. Wvg. Mstr.—Ishwar Lal.

Elgin Mills Co. Ltd., (The), Civil Lines, Kanpur. Mg. Agents—Begg Sutherland & Co. Ltd., Ph :-(office) Kanpur 2170, (mill) 2175. Spindles—52,652 Looms—1,198. Products—grey—dhoti, sheeting, saree Etc., bleached—turkish towel, drill, twill, shirting, sheeting ;dyed—drill, twill, shirting. Cloth width 32-60 in. Counts—1½s and 6s waste yarns, 10s single and doubled yarns for bazar, 13s, 16s, 19s, 22s, 30s weaving yarns. Spg. Mstr.—H. Jones, Wvg. Mstr.—J. Oddy. Cotton consumed 16,890 Candies.

Indra Spg. & Wvg. Mills, (The), (formerly Agra Spg. & Wvg. Mills Co. Ltd.,), Jeoni-Ki-Mandi, Agra. Prop.—Seth Suganchand. Office—mill premises. Ph :— Agra 302. Spindles—13,920. Cotton consumed 1,259 Candies.

Johns' Mills Co, (formerly Johns' Corporation Spg. Mill), Jeoni-Ki-Mandi, Agra. Receivers & Managers—M. B. Tavakley & P. S. Mathur. Spindles—51,360. (Not working since 5. 5. 49).

J.K. Cotton Mfg. Ltd.. (The), Kalpi Road, Kanpur. Mg. Agents—J. K. Commercial Corporation Ltd., Kamla Tower, Kanpur. Ph :—(office) Kamla Tower Exchange 2532—34 & 36 (mill) 2562. Spindles—22,400, Looms—30. Cotton consumed 4,761 Candies.

Juggilal Kamlapat Cotton Spg. & Wvg. Mills Co. Ltd., (The), Kalpi Road, Kanpur. Mg. Director—Sir Padampat Singhania, Kamla Tower, Kanpur. Ph:—(office), 2532—4. (mill) 2206 & 2616. Spindles—44,964, Looms—895. Products—cotton yarns, piece goods, tapestry cloth and print. Spg. Mstr.—S. K. Kolhekar, Wvg. Mstr.—R. W. Harduley. Cotton consumed 8,244 Candies.

Kanauj Dyeing & Wvg. Mills, Mohalla Patanola Kanauj. Props—L. Manilal Benimadhava. Office—mill premises. Looms—58.

Lakshmiratan Cotton Mills Co. Ltd., (The), Kalpi Road, Kanpur. Mg. Agents—B. R. Sons Ltd., Behari Niwas, Chatai Mahal, Kanpur. Ph .—2407, 2618, (mill) 2554, 2785. Spindles—40,420, Looms—786. Products—dhoti, drill, longcloth, surmai, duck, turkish towel, dhoti, saree Etc., Cloth width 33—62 in. Counts—2s to 60s. Cotton consumed 5,935 Candies.

Lalla Mal HardeoDass Cotton Spg. Mills Co., (The), Sadabad Gate, Hathras City. Controller—Sheo pershad. Office—mill premises. Ph :—Hathras 14. Spindles—11,380. Spg. Mstr.—Ardisher Aria. Cotton consumed 424 Candies (Remained closed from September, 50 to July 1951)

Modi Spg. & Wvg. Mills Co. Ltd., Modinagar. Meerut. Mg. Agents—Rai Bahadur Gujarmal Modi & Bros. Ltd., Office—mill premises. Ph :—513. Spindles—20,000, Looms—504. Products—saree, dhoti, sheeting, mull, markin, poplin, shirting, sock Etc., Cloth width 26—60 in. Cotton consumed 7,572 Candies.

Moradabad Spg. & Wvg. Mills Co. Ltd., (The), Moradabad. Mg. Director—Lala Hari Raj Swarup. Ph :—46. Spindles—13,488. (Not working since 7th March 1949).

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UTTAR PRADESH—*Cotton Mills* (*contd.*)

Muir Mills Co. Ltd., (The), Kanpur. Agents—India Textile Syndicate Ltd., 55/155, Generalganj, Kanpur. Ph :—(office) Kanpur 2112. Spindles—86,318, Looms—1,801. Products—grey—dhoti, longcloth, shirting, sheeting Etc. bleached—drill, sheeting, shirting Etc., dyed—dosuties, drill. Cloth width 29—85 in. Wvg. Mstr.—W. Bradshaw. Cotton consumed 18,163 Candies.

Narayan Cotton Mills, (The), Bansmandi, Kanpur. Proprietors—H. Bevis & Co., Ph :—(office) Kanpur 2131. Spindles—14,500. Looms—300. Products—dhoti, sheeting, saree Etc., Cloth width 28—46 in. (Not working since 24th April 1948)

New Victoria Cotton Mills Co. Ltd., (The), 14/1, Civil Lines, Kanpur Mg. Agents—J. P. Srivastava & Sons Ltd., Ph :—Kanpur 2311, 2160 & 2403. Spindles—48,239, Looms—1,148. Products—longcloth, dhoti, coating, saree, sheeting, shirting. Cloth width 40—60 in. Counts—1s—40s. Spg. Mstr.—N. S. Kapur, Wvg. Mstr.—B. S. Tyagi. Cotton consumed 11,369 Candies

Prem Spg. & Wvg. Mills Ltd., (The), Ujhani, Hathras. Secy.—L. Kailash Chandra Soni. Spindles—17,600. (Not working).

Ramchand Spg & Wvg. Mills, (formerly New Ramchand Cotton Mills), Hathras. Owners—Hiralal Gulabchand & Co., Office—mill premises. Ph :—(office & mill) Hathras 22. Spindles—20,020, Looms—171. Products—grey—longcloth, dhoti, saree, shirting, dosuties Cloth width 28—54 in. Spg. Mstr.—A. D. Ghaswala, Wvg. Mstr.—Tarkeshwar Prasad. Cotton consumed 3,127 Candies.

Raza Textiles Ltd., (The), Jwalanagar, Rampur. Mg. Agents—Sir J. P. Srivastava & Sons (Rampur) Ltd., Office—mill premises. Ph :—(office) Rampur 268, (mill) Rampur 255. Spindles—28,436. Looms—440. Products—chaddar, dhoti, drill, markin, saree, shirting Etc., Cloth width 28—60 in. Counts—12s, 14s, 30s, 35s. Cotton consumed 4,163 Candies.

Sachendi Cotton Mills, (The), Sachendi. Owners—Lala Ram Narain Garg, garg Bhuwan, Civil Lines, Kanpur. Ph :- 2226. Spindles—3,980. Counts—6s, 10s. (Not working since 31—3—46).

Shri Vikram Cotton Mills Ltd., (Formerly R. G. Cotton Mills Co. Ltd.,) Talkatora, Lucknow. Mg. Agents—Ranjit Singh & Sons Ltd., Office—mill premises. Ph :—Lucknow 189&797. Spindles—17,544, Looms 323. Products—dhoti, longcloth, mulmul, markin Etc., Spg. Mstrs.—W. S. Sabherwal & S. N Deb. Wvg. Mstr.—J. N. Oberoi. Cotton consumed 6,060 Candies.

Sri Radha Krishna Mills, (The), (Formerly Mirzapur Cotton Mills), Narghat, Mirzapur. Agents—Sekhsaria Bros, Ltd., 15, Vivekananda Road, Calcutta. Looms—74. Products—grey—markin, dhoti, saree ; printed—chintz & saree. Cloth width 36—44 in.

Swadeshi Bima Cotton Mills, (The). Grand Trunk Road, Aligarh. Mg. Agents—Bharat Stores Ltd., Agra. Office—mill premises. Ph :—Aligarh 63. Spindles—15,072. Spg. Mstr—V. Y. Guptey.

Swadeshi Cotton Mills Co. Ltd., (The). Juhi, Kanpur. Agents—Jaipuria Bros. Ltd, Generalganj, Kanpur. Ph :—Kanpur 2459 & 2668. Spindles—1,13,204, Looms—1,979. Products—grey—bedsheet, markin, chaddar, coating, dhoti, crepe, drill, khadi Etc., bleached—bedsheet, chaddar, saree, markin Etc, dyed—canvas, coating, crepe, khadi markin Etc., Counts—2s to 60s folded yarns of all descriptions and staple fibre yarns Cotton consumed 25,176 Candies.

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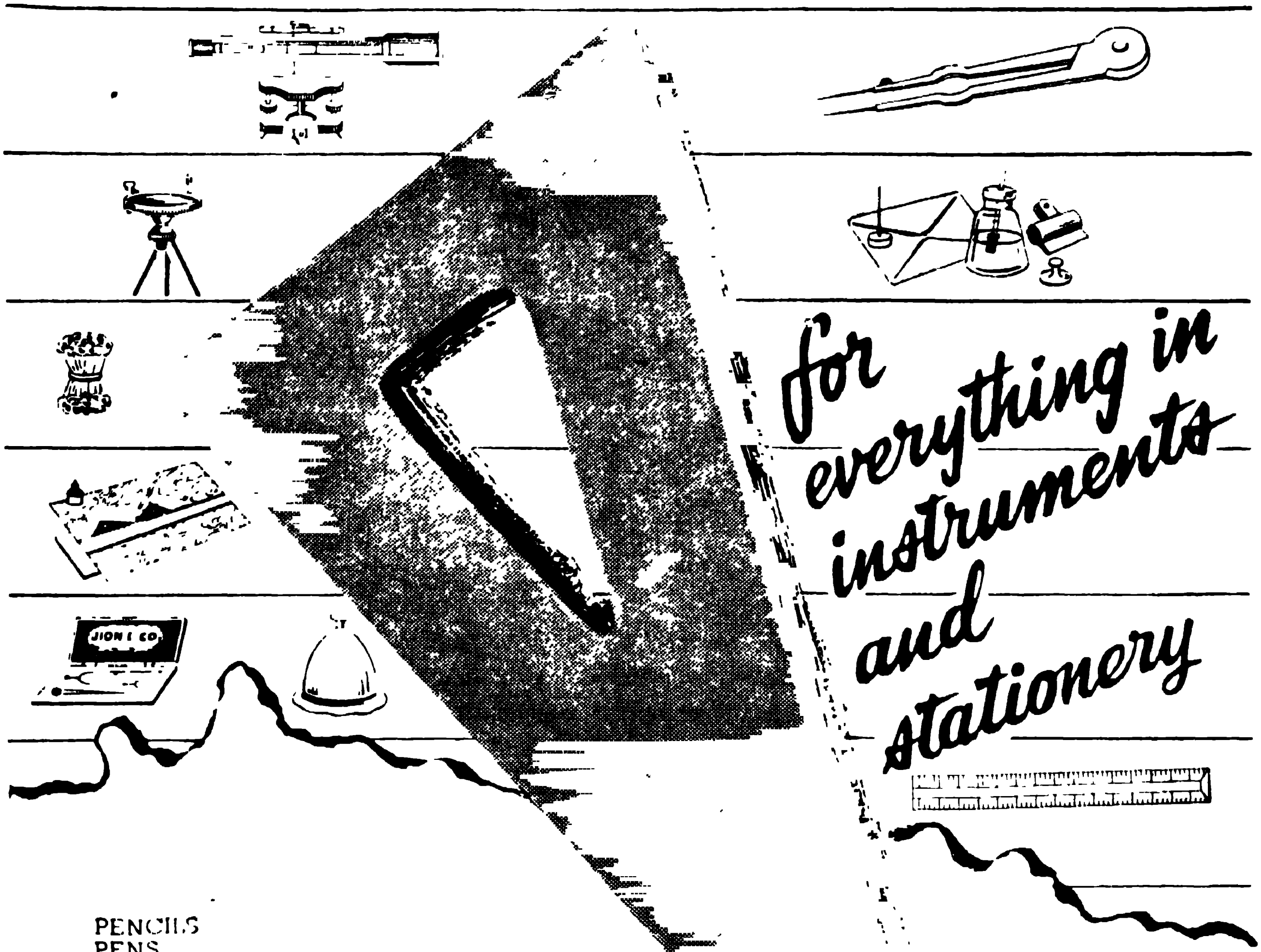
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JUTE MILLS IN INDIA

Adamjee Jute Mills Ltd., Belur Math, Howrah. Agents—Adamjee Hajee Dawood & Co. Ltd., "Stephen House", 6, Dalhousie Square East, Calcutta. Products—hessian, sacking, canvas. Looms—911, Spindles—12,568. Cloth width 23-57 in.

Agarpara Jute Mills, Kamarhatty Post, 24, Parganas, West Bengal. Agents—B. N. Elias & Co. Ltd., Norton Buildings, 1 and 2, Old Court House Corner, Calcutta. Products—hessian, carpets, canvas, sacking tapes, jute and cotton webbing, coloured cords, twine, jute ropes. Looms—1,58, Spindles—15,444. Counts—6lbs. to 60lbs. per spindle. Cloth width—1½ - 50 in.

Albion Jute Co. Ltd.,—Joychandipur, P. O. and town—Budge Budge. Office—9, Dalhousie Square East, Calcutta—1. Looms—498, Spindles 10,240. Cloth width—23-45 in.

Alexandra Jute Mills Ltd., P. O. Jagatdal, 24, Parganas. Agents—McLeod & Co. Ltd., 3, Netaji Subhas Road, Calcutta. Looms—446, Spindles—8,176. Cloth width—hessian 36-40 in : sacking 22-30 in.

Alliance Jute Mills Co. Ltd., P. O. Jagatdal, 24, Parganas. Agents—McLeod & Co. Ltd., 3, Netaji Sudhas Road, Calcutta. Looms—1,264, Spindles 27,264. Cloth width—hessian 36-45 in : sacking 22-32 in.

Anglo India Jute Mills Co. Ltd., Upper, Middle, Lower and Jagatdal Mills, Kankinara. Agents—Duncan Bros. & Co. Ltd., 31, Netaji Subhas Road, Calcutta. Looms—2,561, Spindles—51, 360. Counts—8lbs. to 48lbs.

Angus Jute Co., Angus P. O., Hooghly Dist. (Bhadreswar, E. I. Rly.). Office—3, Clive Row, Calcutta. Looms—1,196. Products—sacking, jute and hessian.

Auckland Jute Co. Ltd., Shamnagar (Jagatdal), 24, Parganas (Kankinara Rly.Station). Agents—Bird & Co. Ltd., Chartered Bank Buildings, Calcutta. Looms—810, Spindles—17,288. Products—tarpaulins, canvas, hessians and all classes of jute bags. Cloth width—23-53 in.

Balliaghatta Jute Mills, Balliaghatta, Calcutta.

Bally Jute Co. Ltd., Bally (Howrah). Looms—959, Spindles—19,206 Products—tarpaulins, sackings, canvas, hessian and sacking bags. Cloth width—22-60 in.

Baranagore Jute Factory Co. Ltd., (Baranagore East Mill), Alambazar, 24, Parganas. Agents—Jardine, Henderson Ltd., 4, Clive Row, Calcutta. Looms—1,080, Spindles—24,366. Products—sacking and jute hessians Cloth width—22-60 in.

Baranagore Jute Factory Co. Ltd., (Baranagore South Mill), Alambazar, 24, Parganas. Agents—Jardine, Henderson Ltd., 4, Clive Row, Calcutta. Looms—809. Cotton bagging looms—15. Products—jute hessians and sackings, paper lined bags, cotton baggings. Cloth width 22– 45 in.

Belvedere Jute Mills Co.Ltd., Sankrail P. O. (Sankrail Station, B. N. R., or River Ferry from Candpal Ghat to Rajgunge). Agents—Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta. Looms—820, Spindles- 15,488.

Bengal Jute Mill Co. Ltd., Sibpore, Howrah. Agents—Sooramull, Nagarmull, 8, Dalhousie Sq. East, Calcutta. Looms—1,000, Spindles—14,278 (14,134 Spining, 144 twist) Products—hessian, sacking cloth and bags, jute webbings, jute twines, Tarpauline etc., Cloth width—up to 48 in.

Bharat Jute Mills Ltd., Dassnagar, Howrah. Mg. Agents- Dass Brothers, 29, Strand Road, Calcutta. Looms—320. Cloth width—26-45 in. jute wobbing width-- 1 4 in. Products--jute twine.

Birla Jute Manufacturing Co. Ltd., P. O. Birlapur, Budge Budge, 24, Parganas. West Bengal. Agents—Birla Bros. Ltd., 8, Royal Exchange Place, Calcutta. Looms—2,015 Spindles—26,692, Counts—4lbs to 50lbs. Products—hessian cloth and bags, sacking cloth & bags.

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JUTE MILLS IN INDIA—(*contd.*)

jute union canvas, jute canvas, dobby and tapestry carpets, roves, chair cloths, cordage, twine yarn, webbing. Cloth width—20·72 in.

Budge-Budge Jute Mills Co Ltd., Budge Budge, 24 Parganas. Agents—Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta. Looms—991, Spindles—22,220.

Calcutta Jute Mfg Co. Ltd., Narkeldanga, 24, Parganas, West Bengal. Agents—Dayaram & Sons, 9, Old Court House Street, Calcutta Looms—502.

Caledonian Jute Mills Co Ltd., Budge Budge, 24, Parganas, West Bengal. Agents—Andrew Yule & Co. Ltd., 8. Clive Row, Calcutta. Looms—616, Spindles—12 744.

Champdany Jute Co. Ltd., Baidyabati, Dist. Hooghly. Agents—James Finlay & Co. Ltd., 2, Netaji Subhas Road, Calcutta. Looms—500. Spindles—12,164 Hessian 36 to 45 in. sacking 22 to 29 in.

Cheviot Mills Co. Ltd., Budge-Budge, 24 Parganas. Agents—Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta. Looms—530, Spindles—11,596.

Chitavalsah Jute Mills Co. Ltd., Chittavalsa P. O., Vizagapatam Dist. Agents—Mcleod & Co Ltd , 3, Netaji Subhas Road, Calcutta. Looms—500, Spindles—13,684. Cloth width—24 52 in (Out of 500 looms, 376 looms are steam driven)

Clive Mills Co. Ltd , 43/1, Garden Reach, 24 Parganas. (Santoshpur Rly Station), West Bengal. Mg. Agents—Shree Krishna Investment Co Ltd., 1B. Halwasiya Road, Calcutta. Looms—969, Spindles—19,998 Cloth width—37-56½ in.

Dalhousie Jute Co. Ltd., Champdany, Baidyabati. Dist. Hooghly. Agents—Bird & Co. Ltd , Chartered Bank Buildings, Netaji Subhas Road, Calcutta. Looms—792, Spindles—16,626 Cloth width, hessian 36-82 in. sacking 22 32 in.

Delta Jute Mills Co. Ltd., Sankrail (Sankrail Station, B. N. R , or River Ferry from Chandpal Ghat to Rajgunge). Agents—Andrew Yule & Co. Ltd , 8, Clive Row, Calcutta. Looms—779. Cloth width 23-45 in.

Eastern Manufacturing Co. Ltd., Post—Titaghur, Dist. 24 Parganas, West Bengal. Agents—McLeod & Co. Ltd., 3, Netaji Subhas Road, Calcutta. Looms—550. Products—jute webbing and tapes, plain, striped, fancy dyed ½ to 5 in. wide jute , carpet plain weave natural or dyed ; jute sashcord ⅜ to 1.9/16 circumference with or without core ; jute yarns 7½ lbs to 15 lbs. per spindle ; twist yarns 2-5 ply.

Empire Jute Co. Ltd., P. O Talpukur, Titaghur, West Bengal. Agents—McLeod & Co. Ltd., 3, Netaji Subhas Road, Calcutta. Looms 500, Spindles—9,402.

Fort Gloster Jute Mfg. Co. Ltd., Fort Gloster (Bauria and Nalpur Rly Station B. N. R.). Agents—Kettlewell Bullen & Co. Ltd., 21, Strand Road, Calcutta. Looms—1,884, Spindles—37,600. Products—light and heavy hessians and sacking bags Cloth width—25-50 in.

Fort William Jute Co. Ltd., Sibpore (Howrah). Agents—Kettlewell, Bullen & Co. Ltd. 21, Strand Road, Calcutta Looms—1,014, Spindles 20,450. Products light and heavy hessians, hessian and sacking bags. Cloth width—25-50 in. (All looms are electrified, but a portion of the mill is steam driven).

Gagalbhai Jute Mills Ltd., Sijberia, P. O. Uluberia, Dist Howrah. Agents—Mafatlal Gagalbhai & Sons, 18, Netaji Subhas Road, Calcutta. Looms—620, Spindles - 12,380. Products—hessian cloth, and sacking fabrics. Cloth width—28·56 in.

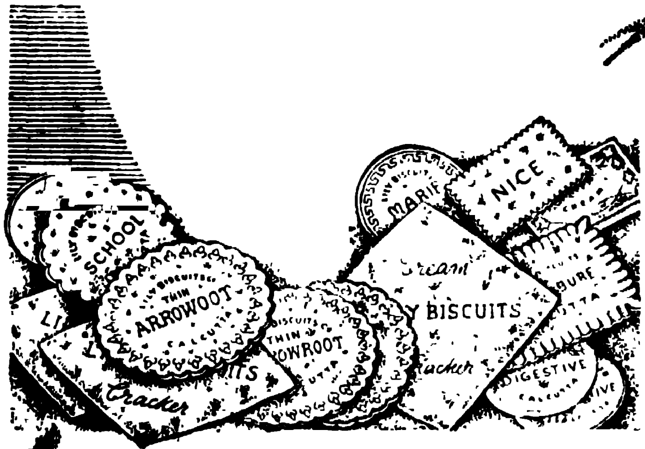
Ganges Mfg Co. Ltd., Bansberia Jute mill, Bansberia, Hooghly Dist. Agents—McNeill & Barry Ltd , 2, Fairlie Place, Calcutta. Looms - 1,709, Spindles—35,374. Products—special hessians, hop cloth, sacking, canvas and all types of jute bags and packs.

Gondalpara Jute Mill, Chandernagore (E. I. Rly.), Agents- Gillanders, Arbuthnot & Co. Ltd., 8, Netaji Subhas Road, Calcutta.

Gourepore Co. Ltd., Naihati, 24 Parganas, West Bengal. Agents McNeill & Barry Ltd , 2, Fairlie Place, Calcutta Looms - 1,394, Spindles—20,520. Cloth width—36-53 in

Hastings Mill Ltd., P. O. Rishra, Hooghly Dist. Mg. Agents—Bangur Brothers Ltd., 14, Netaji

MANUFACTURED FROM SELECTED INGREDIENTS THEY ALWAYS ENSURE BETTER MEDIUM FOR YOUR TIFFIN.

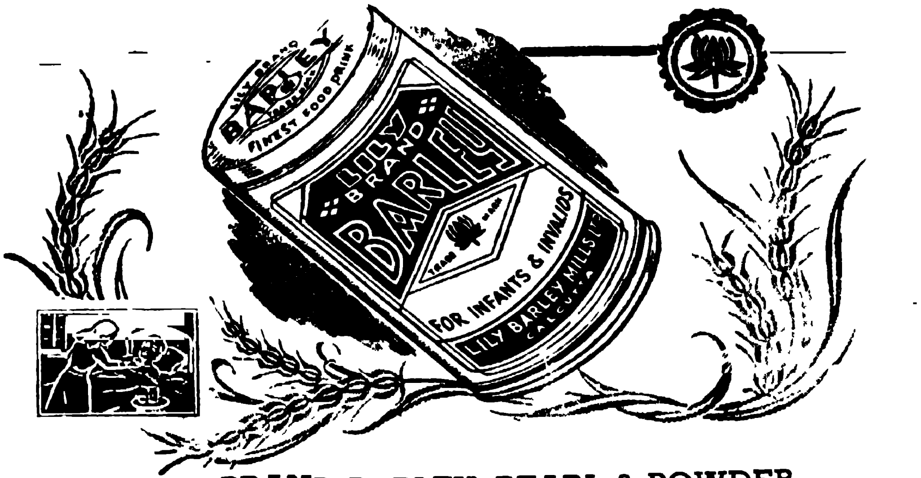


A Few of the popular items:
Nice, Marie, Boston-Cream, Carnival, Fruit Cream, Custard-Cream, Thin Arrowroot, Cream Cracker, Malto, Barley Biscuits etc., etc.,

TRY LILY'S CONFECTIONERY - THEY ARE ALWAYS FAVOURITES with your CHILDREN.

LILY BISCUIT COMPANY LIMITED.

3, RAMAKANTA SEN LANE, CALCUTTA—4.



LILY BRAND BARLEY PEARL & POWDER
Cools down the parched system and imparts energy.
It is always the best health drink.

LILY BARLEY MILLS LIMITED.

19, Muraripukur Road, Ultadanga, CALCUTTA—4.

JUTE MILLS IN INDIA—(*contd.*)

Subhas Road, Calcutta. Looms—1 078, Spindles—22,132. Products—Hessian cloth and bags, sacking cloth and bags, jute canvas, twine, jute rove etc. Cloth width - 25 60 in.

Hooghly Mills Co. Ltd., 9, Garden Reach, Calcutta. Agents—Gillanders, Arbuthnot & Co. Ltd., 8, Netaji Subhas Road, Calcutta. Looms—720. (Out of 720 looms, 158 looms are electrically driven).

Howrah Mills Co. Ltd., 493/C, Grand Trunk Road (South), P. O. Sibpore, (Howrah). Agents—Jardine Henderson Ltd., 4, Clive Row, Calcutta. Looms—1,950. Spindles—39,596. Cloth width 20-47 in.

Hukumchand Jute Mills Ltd., Naihati, (Halisahar and Naihati Rly. Stations). Agents—Ramdutt Ramkissendas, Bombay Mutual Bldg., Brabourne Road Calcutta. Looms—2,272, Spindles -44,160. Products—Hessian bags and cloth, sacking cloth and bags, twine, canvas, etc., Cloth width—22-72 in.

Hurdutroy Chamaria Jute Mill, 1, Cullen Place, Howrah.

Indian Jute Mills, Serampore, Dist. Hooghly, West Bengal. Agents—Mackinnon, Mackenzie & Co., 16, Strand Road, Calcutta Looms—1,076. Cloth width- 28—60 in.

Jagatdal Jute Mill. Jagatdal, Kankinara.

J. K. Jute Mill Co. Ltd., Lala Kamlapat Road, Kanpur. Directors—Lala Purshottamdas Singhania (Director-in-charge), Sir Padampat Singhania, Kt., Lala Kailashpat Singhania, Lala Lakshmipat Singhania, Lala Sital Prasad. Office—Kamla Tower, Kanpur. Looms—450, Spindles—12,106 (256 dblg). Counts—7s to 36s. Cloth width—26½-50 in. Products—jute hessians, twills, sacking, canvas and chair cloth.

Juggilal Kamlapat Jute Mills Co. Ltd., Kalpi Road, Kanpur, Uttar Pradesh. Head Office—Kamla Tower, Kanpur. Looms—434, Spindles—12,116. Counts—8 lbs. to 36 lbs. Cloth width 26½-72 in.

Kamarhatty Co. Ltd., Kamarhati P. O. (Agarpara Rly. Station). Agents—Jardine Henderson Ltd., 4, Clive Row, Calcutta. Looms—1,797, Spindles—20,408. Cloth width—22-40 in.

Kanknarrah Co Ltd. Kankinara P. O., Dist. 24 Parganas. Agents—Jardine Henderson Ltd., 4, Clive Row, Calcutta, Looms—1,527, Spindles—29,084.

Katihar Jute Mills Ltd., 178, Harrison Road, Calcutta. Mg. Agents—Radhakissen Chamaria. Looms—220.

Kedarnath Jute Mfg. Co. Ltd., Salkia, (Howrah, West Bengal). Agents—Balbulall & Co. Ltd., 34—36, Jatindra Mohan Avenue, Calcutta. Looms—220, Spindles—4,194.

Kelvin Jute Mills, Talpukur, 24 Parganas, West Bengal. Agents—McLeod & Co. Ltd., 3, Netaji Subhas Road, Calcutta. Looms—703, Spindles—12,860.

Khardah Jute Mill Titaghur, 24 Parganas. Agents—Anderson Wright Ltd , 7. Wellesley Place, Calcutta. Looms—1,530, Spindles—30,864.

Kinnison Jute Mills Co Ltd., Titaghur, 24 Parganas. Agents—F. W. Heilgers & Co Ltd., Chartered Bank Buildings, Netaji Subhas Road, Calcutta. Looms—1,250. Cloth width—22—50 in.

Lansdowne Jute Co. Ltd, Belgachia, 24 Parganas. (Ultadanga Rly. Station). Agents—Bird & Co., Chartered Bank Buildings, Calcutta. Looms—931. Spindles—17,732 Cloth width—hessian 36—50 in, sacking 22-30 in.

Lawrence Jute Co Ltd, Chackasi P. O., Dist. Howrah (Chackasi Rly., Station, Bauria). Agents—Bird & Co., Chartered Bank Buildings, Calcutta. Looms—840. Cloth width—19½ 50 in.

Lothian Jute Mills Co. Ltd, Budge-Budge. Agents—Andrew Yule & Co. Ltd , 8, Clive Row, Calcutta. Looms—558.

Ludlow Jute Co. Ltd, Chackasi (Chengail Rly., Station, B. N. R.). Agents—Ludlow Jute Co. Ltd., 7, Royal Exchange Place, Calcutta

Luxmi Jute Mills Ltd., Beliaghatta, Calcutta, West Bengal. Mg. Agents—More Bros. Ltd., 5, Clive Row, Calcutta. Looms—450, Spindles—9.294.

JUTE MILLS IN INDIA—(*contd.*)

Mafatlal Gagalbhai Jute Mills, Ulooberia, Howrah.

Mahabir ' Jute Mills Ltd. Sahjanwa, Gorakhpur, U. P. (Sahjanwa Rly., Station, B. N. W. Rly.). Agents—Agarwal Bros. & Co, Sahjanwa, Gorakhpur, U. P. Looms—151, Spindles—3,148 (3,004 spg., 144 twisting). Products—Gunny bags and hessians. Cloth width—23½—50 in.

Maheshwari Deni Jute Mills Ltd., Hairisganj, Rail Bazar, Kanpur, Uttar Pradesh. Mg. Agents—Khaitan Bagla & Co., Office—mill premises. Looms—220, Spindles—3,924. Products—twine, hessian and jute bag.

Megna Mills Co. Ltd., P. O Jagatdal, 24 Parganas, West Bengal. Agents—Mackinnon Mackenzie & Co., 16, Strand Road, Calcutta. Looms—1,008. Products—Hessian cloth and bags, sacking cloth and bags. Cloth width—28-60 in.

Nafar Chandra Jute Mills Ltd., Kankinara, 24 Parganas. Mg. Agents—N. C. Kolay & Sons, 36, Strand Road, Calcutta. Looms—220, Spindles—4,002. Products—hessian cloth and bags, sacking cloth and bag. Cloth width—26½—40½ in.

Naihati Jute Mills Co. Ltd., Halisahar, Naihati, 24-Parganas, West Bengal. Agents—F. W. Heilgers & Co., Chartered Bank Buildings, Calcutta. Looms—815.

National Co. Ltd., P. O. Sankrail, Howrah Dist. Agents—Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta. Looms—852, Spindles—16,224.

Naskarpara Jute Mills Co Ltd., Ghusuri, Howrah, West Bengal. Agents—Howrah Trading Co. Ltd., 144-145, Old Ghusuri Road, Howrah. Looms—425, Spindles—8,616.

Nellimarla Jute Mills Co Ltd., Nellimarla P. O, Vizagapatam Dt.. Madras. Agents—McLeod & Co. Ltd., 3, Netaji Subhas Road, Calcutta. Looms—316, Spindles—8,868. Products—Hessian and sacking, jute cloth and twines.

New Central Jute Mills Co. Ltd., Ghusury (Howrah Dist.). Office—9, Dalhousie Square East, Calcutta. Looms—709, Spindles—13,590. Products—Hessian cloth and bags, sacking and twine etc., Cloth width 18-54 in.

Northbrook Jute Co. Ltd., Vill—Champdany, Baidyabati (E. I. Rly.), Hooghly, West Bengal. Agents—Bird & Co., Chartered Bank Buildings, Calcutta. Looms—567.

Nuddea Mills Co. Ltd., Naihati, 24 Parganas, West Bengal. Agents—McNoill & Barry Ltd., Fairlie Place, Calcutta. Looms—1,092, Spindles—25,524. Products all ordinary hessian and sacking fabrics, fine hessian up to 22 and 24 porter, jute canvas up to 20 porter. Fine yarn counts to 3½ lbs. per spindle. Cloth width—sacking 26½-40 in. hessian 36-52 in.

Orient Jute Mills Co. Ltd., Budge-Budge, 24 Parganas. Agents—Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta. Looms—601, Spindles—10,880.

Prabartak Jute Mills, Kamarhatty, 24, Parganas, West Bengal. Mg. Agents—Prabartak Trust, 61, Bowbazar Street, Calcutta Looms—121, Spindles—2,120. Products—hessian & sacking cloth. Cloth width 26-45 in.

Premchand Jute Mills Ltd., Chakasi (Chengail Rly. Station, Howrah, B N R. Bengal). Agents—Raja Janokinath Roy & Bros. Ltd., 81, Sova Bazar Street, Calcutta. Looms—604, Spindles—11,628. Products—gunny bags and hessian cloth. Cloth width—48 in. maximum

Presidency Jute Mills Co. Ltd., Rishra, Hooghly, West Bengal Agents—McLeod & Co. Ltd., 3, Netaji Subhas Road, Calcutta. Looms—400, Spindles—8,204 Products—hessian and sacking cloth and yarn.

Rai Bahadur Hurdutroy Motilall Jute Mills, Katihar, Bihar. Agents—Rai Bahadur Seth Motilalji Chamaria, 68, Cotton Street, Calcutta.

Raigarh Jute Mills Ltd, Raigarh, B. N. Rly., Agents—Raigarh Trading Co. Ltd., Looms—150, Spindles—3,294 Counts—8lbs. to 70 lbs. per spindle. Products—hessian and sacking. Cloth width—25-50 in.

Rameshwara Jute Mills. Ltd., Muktapur, P. O. Darbhanga, Bihar. Mg. Agents—McNeill & Barry Ltd, Post Box No. 15. 2, Fairlie Place, Calcutta. Looms—305, Spindles—5,904. Products—sacking fabrics.

JUTE MILLS IN INDIA—(*contd.*)

Relliance Jute Mills Co Ltd, Bhatpara, 24 Parganas, (Kankinara Rly. Station). Agents - Jardine Henderson Ltd., 4, Clive Row, Calcutta. Looms—1,276.

Samnuggur Jute Factory Co. Ltd., (North), Dist. Hooghly, West Bengal (Bhadreswar, E. I. Rly). Agents—Thomas Duff & Co. (India) Ltd., 3, Clive Row, Calcutta. Looms—1,057. Products—Jute fabrics.

Samnuggur Jute Factory Co. Ltd, (South), Garulia, (Shamnagar Rly. Station. E. I. Rly). Agents—Thomas Duff & Co. (India) Ltd., 3, Clive Row, Calcutta. Looms—956.

Shree Bajrang Jute Mills Ltd., Guntur. Madras. Mg. Agents—Shree Hanuman Investment Co. Ltd., 178, Harrison Road, Calcutta Looms—110 (sacking). Spindles—2,518. Products—jute sacks, sacking cloth and twines. Cloth width 24 48 in.

Shree Ambica Jute Mills Ltd, P. O Belurmath, Howrah, West Bengal. Mg. Agents—Bagaria More Co. Ltd., 5, Clive Row, Calcutta. Looms—911, Spindles—12,936. Products—hessian, sacking & canvas Cloth width—23-57 in.

Shree Ganesh Jute Mills Ltd., 66, Seth Banshidhar Jalan Road, Salkia, Howrah. Mg. Director—Govindram Tulshan. Office—43, Sir Hari Ram Goenka Street, Calcutta 7. Looms—220, Spindles—2,372. Products—hessian, sacking twine, bags, yarn etc.,

Shree Gouri Shankar Jute Mills Ltd., Shamnagar, 24 Parganas. Mg. Agents—Bhagat & Co, Office—10, Clive Row, Calcutta. Looms—220, Spindles—5,196.

Shree Hanuman Jute Mills. Ghusuri, Howrah. Props—Soorajmull Nagarmull, 8, Dalhousie Sq. East, Calcutta. Looms—980, Spindles—21,070. Products—Jute fabrics—sackings, hessians, listing, twine, carpet, gunny etc., Cloth width—27—80 in.

Shree Luchminarain Jute Mfg. & Engg. Co., Konnagar. Agents—Mukhram Luchminarain, 59, Netaji Subhas Road, Calcutta. Looms—500 and 70 cotton looms.

Shree Mahadeo Jute Mills, 40-1, G. T. Road, Bally. Agents—Pratapmull Rameshwar. Looms—220.

Societe Generale Industrielle De Chandernagore, Gondalpara Mills, Chandernagore, W. Bengal. Agents—Gillanders Arbuthnot & Co., Netaji Subhas Road, Calcutta. Looms 607. Products - hessian and sacking.

Soorah Jute Mills Co. Ltd., 102, Narkoldanga Main Road, Calcutta. Agents—Hindusthan Investment Corporation Ltd., 8, Royal Exchange Place, Calcutta. Looms—401, Spindles—8,338. Products—Jute yarn and cloth. Counts—8 lbs. to 56 lbs. Cloth width—26—45 in.

Standard Jute Co. Ltd., Titaghur, 24 Parganas, W. Bengal. Agents—Bird & Co., Chartered Bank Buildings, Calcutta. Looms—650. Cloth width—23-72 in.

Titaghur Jute Factory, Nos 1 & 2, Titaghur, 24 Parganas, W. Bengal. Agents—Thomas Duff & Co. (India) Ltd., 3, Clive Row, Calcutta. Looms—1,794. Products—hessian and sacking. Cloth width—23 80 in. Regd. Office—Meadow House, Dundee.

Union Jute Mill Co. Ltd, (North Mill), Tengra P. O. Calcutta. Agents—Bird & Co., Chartered Bank Buildings, Calcutta. Looms—537, Spindles—11,162. Cloth width—hessian 36—45 in. sacking 23—30 in

Union Jute Mill, (South Mill), Buddertolla, Dist., 24 Parganas. Agents—Bird & Co., Chartered Bank Buildings, Calcutta. Looms—807. Cloth width—23—50 in.

Victoria Jute Co Ltd, Telinipara (Bhadreswar Rly. Station, E. I Rly). Agents—Thomas Duff & Co (India) Ltd., 3, Clive Row, Calcutta Looms—1,331.

Waverley Jute Mills Co. Ltd, P. O. Shamnagar, 24 Parganas. Agents—McLeod & Co. Ltd, 3, Netaji Subhas Road, Calcutta. Looms—465, Spindles—10,536. Cloth width—hessian 36—45 in. sacking 23—32 in. Products—hessian and sacking cloth, bags and yarn.

Wellington Jute Mills, P. O. Rishra, Hooghly. Agents—James Finlay & Co. Ltd., 2, Netaji Subhas Road, Calcutta. Looms—800, Spindles—17,274 Cloth width—20—45 in.

Sree Ram Silk Manufacturing Co.

Prop. HASTINGS MILL LTD.
Mg. Agents : **BANGUR BROS. LTD.**
14, Netaji Subhas Road, CALCUTTA—1.

Manufacturers Of :—
ART-SILK FABRICS SPECIALLY GEORGETTE 1111 & NINON 501
Of
FINEST QUALITY AND DESIGN.

ENQUIRIES SOLICITED

SWADESHI INDUSTRIES LTD.
(ESTABLISHED IN 1936)
Mills at :—PANIHATI, 24-Parganas, (West Bengal)

Textiles Section—

Manufacturers of Silk and art-silk fabrics designed for eye appeal and longwear.

SAREES, SATIN, SHIRTINGS, SUITINGS ETC.

Bakelite Section—

Manufacturers of "221 INDIA" brand BAKELITE ELECTRICAL ACCESSORIES which are the best and have an excellent reputation in India & abroad.

SWITCHES, CEILING ROSES, CUT OUTS, WALL PLUGS, HOLDERS Etc.

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Gram : JAIPURIA
33, NETAJI SUBHAS ROAD, CALCUTTA

SILK & RAYON MILLS IN INDIA

WEST BENGAL

Bengal Silk Mills Co. Ltd., (The), 13, Ariff Road, Calcutta Office—3, Amratolla Lane, Calcutta. Selling Agents—K. G. Kalwani, 59, Cross Street, Calcutta

B K. Shaw Mantle Works, 3, Beadon Street, P. B. No. 11409, Calcutta 6.

Calcutta Woollen & Silk Mills, (The), Lilooah, Howrah. Office—191, Harrison Road, Calcutta.

Calcutta Silk Manufacturing Co. Ltd., (The), 57, Vivekananda Road, Calcutta. Mg. Agents—Kedarnath Poddar. Loom—210. Cloth width 26-54 in.

Calcutta Silk Weaving Co., Muraripukur Road, Calcutta.

Coonwer Silk Mill, 30, Mission House lane, Tollygunj, Calcutta.

Indian Woollen & Silk Mills Ltd., P. O. Box No. 2489, 82, Stephen House, Dalhousie Square East, Calcutta. Counts—30s, 48s, 60s in single and double yarns.

Jay Shree Textiles Ltd., 8, Royal Exchange Place, Calcutta. See for further particulars in Flax & Linen Mill section

Khaitan Sons & Co., 2, Dalhousie Square East, Calcutta. Proprietor—G. P. Khaitan. 42 looms and subsidiary machinery.

Manindra Mills Ltd., Cossimbazar, Murshidabad, West Bengal. For further particulars see Cotton Section.

Pravati Textile Mills Ltd., Panihati, 24 Parganas. Mg. Agents—K. C. Biswas Co., Office—mill premises. Looms—63. Cloth width 28-56 in. Sales office—4, Ganesh Chandra Avenue, Calcutta.

Ruby Spinning Mills, I O. C., Government Place, East, Calcutta.

Swadeshi Industries Ltd., P. O. Panihati, 24 Parganas, West Bengal. Mg Agents—Anandram Gajadhar, 33, Netaji Subhas Road, Calcutta. Looms—151, Cloth width 26-52 in

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BIHAR

Beni Silk Mill, Sujaganj, Bhagalpur. Proprietor—Mohri Lal Beniprasad.

Bhagalpur Silk Mills, Bhagalpur.

Bihar Silk Mfg. Co., Bhagalpur City.

Choudhuri Silk Mills, Station Road, Bhagalpur.

Eastern Silk Mfg. Co. Ltd., Bhagalpur City. Mg. Agents—Lakhiprasad Loknath & Co., Head office—35, Chittaranjan Avenue, Calcutta. Looms—49.

Indian Silk Manufacturing Co., Bhagalpur.

Rambansi Silk Mills, Bhagalpur. Proprietor—Bansidhar Chandiprasad. Looms 60. Cloth width—silk suitings, 27 in. silk shirtings, 29, 32 and 36 in.

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SALES APPEAL
AT
NO EXTRA COST.

DRESS YOUR PRODUCTS IN A FASHIONABLE TWO COLOURED BOX AT NO EXTRA COST. USE WHITE BOARD FOR THE LID AND THE GAILY TINTED BOARD FOR THE CONTAINER PROPER. THIS SIMPLE METHOD GIVES ADDED SALES APPEAL.

KRAFT PAPER AND BOARD
ARE STRONG, DURABLE AND ALSO INCLUDE WATERPROOF VARIETY.

ORIENT PAPER MILLS Ltd.

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BIRLA BROTHERS LIMITED
8, Royal Exchange Place, Calcutta.

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the MINOR cigarette
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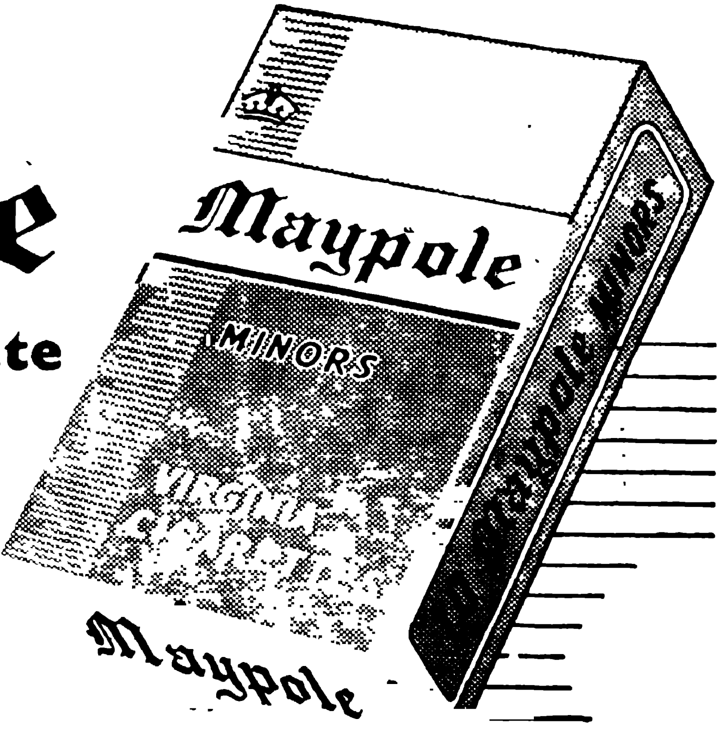

As. 5½ for 10
Rs. 2/3/- for 64
Plus tax where in force

BOMBAY ISLAND

A. A. Patel Weaving Factory, Bhiwandi, Dist. Thana.

Abdul Samad Haji Lal Muhamed Weaving Factory, Bhiwandi, Dist. Thana.

Ahmed Silk Mills, Ambernath. Proprietors—Ahmed Abdul Karim Bros. Ltd., Karim Buildings. Mohamedally Road, Bombay. Looms—270.

Ahmedabad Silk Factory Ltd., New Commercial Mills Compound, Naroda Road, Ahmedabad. Mg. Agents—T. B & Sons. Selling Agents Anu Ltd., Mulji Jetha Market, Dharamraj Gully, Bombay. 100, silk looms with preparatory machinery. B. K. Mehta, Mgr. and Wvg. Mstr.

Alliance Silk Mills, Atlas Mills Compound, Reay Road, Bombay 10.

Allied Silk Mills, near Bengal Chemical Works, Cadell Road, Worli, Bombay 28. Proprietors—Sobhraj Reloomal, 484, Kalbadevi Road, Bombay 2.

Ambika Silk Mills Co. Ltd , (The), 11-12, Haines Road, Bombay 13 Mg. Agents—Maganlal Bhagvandas & Co., Office—mill premises. 300 Looms (150 dobby, 100 drop box, 50 jacquard). Cloth width 26-58 in.

Amrit Silk Mills, Shroff Wadi, Mount Road, Mazagaon, Bombay 10. Office—mill premises. Proprietor—Amritlal Harjivandas. 57 Looms (4 dobbies, 2 jacquards). Cloth width 18-56 in.

Anderson Dawn & Co., Silk Mill Factory No. 2, Finsbury Road, Sowree Bombay 15.

Anis Silk Mills, Sudager Moholla, Bhiwandi, Dist. Thana.

Artex Silk Mills, 271, Nagdevi Street, Bombay 3.

Ashok Silk Mills, 144, Dharavi Road, Bombay, 17. Proprietors—Industrial Development & Investment Co. Ltd., 98/100. Champa Galli, M. J. Market, Bombay. Selling Agents—V. Chatnabhuj & Co.. 125 looms.

Asian Rayon Mills, New Islam Mills Compound, Currey Road, Bombay 13.

Associated Rayon Mills. No. 1, Lalchimney, 22, Lamington Road, (North), Bombay.

Associated Rayon Mills, No. 2. 244/A, Goan Road, Pipe Line, Old Kurla, Bombay.

Bajaj Textile Mills Ltd., Round Building, 3rd Floor, Kalbadevi, Bombay 2.

Balgopal Silk Mills, 13-D, Dhaku Parbu Wadi, Gorupdeo, Mazagaon, Bombay 10.

Bharat Manufacturers, 15, Alli Chambers, Dean lane, Fort, Bombay.

Bharat Silk Mills Ltd., near Kurmuri Village, Agra Road, Kurla, Bombay. Mg. Director—M.S. Doshi. Looms—165. Selling Agents—J. P. Jamnadas & Co., New Resham Bazar, Kalbadevi Road, Bombay 2.

Bhiwandi Textile Works, Samad Mills Compound, Kumbarwada, Bhiwandi, Dist. Thana.

Bipin Silk Mills Co. Ltd., Kasturchand Mills Compound, Dadar Road, Dadar, Bombay 14. Managing Agents—Vadilal & Brother Ltd., 300 looms.

Bishen Silk Mills, Agra Road, Bhandup, Bombay. Office—485, Kalbadevi Road, Bombay. Mg. Agents—B. S. M., Cloth width 26—48 in. Selling Agents—Harbhajan Singh, Jairain Singh, 485, Kalbadevi Road, Bombay. Looms—50. Spindles—800

Bombay Silk Mills Ltd., (The), No. 1 Mill, Colaba Road, Bombay 5. Mg. Agents—Hansraj Sons. Office—mill premises. 684 throwing spindles, 160 doubling spindles. Counts—real silk 13/15 to 45/55, rayon 40 to 150 denier. 43 silk and rayon looms. Cloth width 27 72 in.

Bombay Silk Mills Ltd., (The), No. 2 Mill, Lalbaug, Parel, Bombay 12. Mg. Agents—Hansraj Sons. 1,584 throwing and 200 doubling spindles, 57 silk and rayon looms.

Bradbury Mills Ltd., (The), Ripon Road, Jacob Circle, Bombay. For further particulars see entry in Cotton Section.

Burhanpur Tapti Mills Ltd., Cook's Building, 324, Hornby Road, Fort, Bombay. For further particulars see Cotton Section.

C. & J. Silk Mills, Nehru Road, Vile, Parle Bombay.

Cadell Weaving Mills Co. Ltd., 400, Cadell Road, Bombay. 40 non-automatic and 30 automatic looms. Cloth width 26—54 in.

Central Weaving and Manufacturing Co., (The), Swastik Mills Compound, Ferguson Road, Lower Parel, Bombay. Office—mill premises. 39 looms (22 dobby). Cloth width 25-40 in.

BOMBAY ISLAND SILK & RAYON MILLS —(contd.)

Chhoi Silk Mill Co. Ltd., (The), Suparibaug Road, Parel, Bombay. Regd. office—Bombay Mutual Building, Sir P. Mehta Road, Fort, Bombay. Mg. Agents—Chhoi Kooka Desai & Co., 225 looms. Cloth width 27, 36, 45 and 54 in.

Chokshi Silk Mills, Narayan Nagar, Agra Road, Ghatkopar.

Chovatia Silk Mills Co., 19, Hamam Street, Fort, Bombay.

Crown Spg. & Mfg. Co. Ltd., (The), Gokhale Road, Bombay. *See Cotton Section.*

Deepak Silk Mill,(The), Kalachawki Road, Parel, Bombay. Mg. Agents—Navinchandra Bhogilal. Office—Bombay Cotton Mill Estate, Kalachawki Road, Parel. 65 looms. Cloth width 26—52 in.

Dilip Industries, 17D, Sitafalwadi, Mount Road, Mazagaon. Office—Chunilal Mulchand & Co., Waterloo Mansion, Mayo Road, Museum, Bombay.

D. V. Industries, Bhau Saheb Desai Wadi, 167, Bhawanishankar Road, Dadar, Bombay. Proprietors—V. J. Radia, C. M. Zaveri. 98 looms. Cloth width 27—48 in.

Eldee Velvet & Silk Mills. Opp. Bawala Mosque, Delisle Road, Bombay. Cloth width 36—38 in.

Ganesh Silk Industries, Office—495/7, Kalbadevi Road, New Silk Bazar, Bombay 2. Factory—99/100, Bombay Agra Road, Bhandup (G. I. P.), Greater Bombay. Cloth width 26—58 in.

Hazari Silk Mill, Kasara Basin Road, Darukhana, Mazagaon, Bombay. Proprietors—Navalchand Goolaji & Co.

Hidayatoola Textile Works, Samad Mills Compound, Kumbarwada, Bhiwandi, Dist. Thana.

Hind Silk Mills, Mathurdas Mill Compound, Lower Parel, Bombay.

Indian Art Textile Mills Co. Ltd., 98-100, Champa Galli, Bombay.

Indian Mfg. Co. Ltd., Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay. 54,356 Spindles. Counts—12s to 40s.

Indianese Silk Mills Ltd., Sewri Cross Road, Wadala, Bombay. 92 looms, 3,400 spindles. Cloth width 27-45 in.

Jagmohan Silk Mills Ltd., 37-A, Parel Road, Cross Lane, Chinchpokli, Bombay.

Jai Hind Silk Mills, Bombay Cotton Mills Compound, Kalachowki Road, Parel, Bombay.

Jasmine Mills Ltd, near Mahim Station, Mahim, Bombay. Looms—113.

Jaya Spun Silk Mill, Kapur Mahal, Marine Drive, Bombay.

Kamala Mills Ltd., (The), Tulsi Pipe Road, off Delisle Road, Bombay. Chairman—Sir B. Goenka. Cloth width 32-44 in. 161 looms. *See Cotton Section.*

Kathiawar Textile Mills, (The), Suryodaya Mills Compound, Tardeo, Bombay. *See Cotton Section.*

Khatau Makanji Spg. & Wvg. Co. Ltd., Laxmi Building, 6, Ballard Road, Fort, Bombay. *See Cotton Section.*

Kheta Textile Mills, Bombay Cotton Mill Compound, Kalachowki, Chinchpokli, Bombay. Prop.—Manilal Keshavji Khetani. 45 looms.

Khetani Textile Industries Ltd., 105/107, Bazar Ward, Old Kurla, (G. I. P.), Kurla, Bombay. 173 looms. Cloth width 26 48 in.

Khetan Industries Ltd., Bombay Cotton Mills Estate, Kalachowki Road, Parel, Bombay. Cloth width 26-44 in.

Kohinoor Mills Co. Ltd., (The), No 3 Mill, Lady Jamshetji Road, Dadar, Bombay. Mg. Agents—Killick Industries Ltd., Home Street, Bombay. 282 jacquard and 12 georgette looms. *See Cotton Section.*

Kothari Silk Mills, Atlas Mills Compound, Reay Road, Bombay. Selling Agents—Mulchand Bulakhidas, Devkaran Mansion, Princess Street, Bombay. 36 looms. Cloth width 26—52 in.

Lotus Silk Mills, Kumbharwada, Bhiwandi, Dist. Thana.

Madhowji Dharamsi Mfg Co. Ltd., 15A, Elphinstone Circle, Fort, Bombay. *See Cotton Section.*

Mahajan Silk Mills, Agra Road, Vikhroli.

Maharaj Silk Mills, Gazdar House, Dhobi Talao, Bombay.

Maharashtra Weaving Industries, Yakub Road, Bhiwandi, Dist. Thana.

Manhar Mills Ltd., Tulsiram Gupta Mills Estate, Reay Road, Bombay.

BOMBAY ISLAND SILK & RAYON MILLS —(*contd.*)

Mehra Silk Mills, Pitamber Wadi, Chuna Bhathi Lane, Mahim, Bombay.

Mohanlal Silk Mills, Atlas Mills Compound, Reay Road, Bombay. 25 looms.

Morari Silk Mills, 23, Dongersi Road, Bombay,

Muhammad Nazir Abdullah Wvg. Factory, Bhiwandi. Dist. Thana.

Mukund Silk Mills, Bombay Cotton mills Compound, Kalachowki Road, Parel, Bombay.

Narendra Silk Mills, Atlas Mills Compound, Reay Road, Bombay. Selling Agents—Popatlal Gholabhai & Co., 6, Kishore Building, Kalbadevi, Bombay. 36 looms.

National Art Silk Mills Ltd., 12, Dadar Road, Dadar, Bombay. Directors - J. C Chinai, R. J. Chinai, Mrs. C. B. Nanavaty and S. M. Nanavaty. 160 looms. Cloth width 26-45 in.

National Rayon Mills, 51, Popatwadi, Kalbadevi Road, Bombay 2.

Nehru Silk Mills, Mathuradas Mills Compound, Lower Parel, Bombay. Managing Partner—Harilal Jechand Doshi. Office—mill premises. Stockists—B. Nagindas & Co , Mulji Jetha Market, Navi Galli, Narayan Chowk, Bombay. 132 looms.

New Commercial Mills Co. Ltd., Cloth Shop, Dharamraj Galli, M. J. Market, Bombay.

New Era Textile Mills Co., (The), Tulsi Pipe Road, Mogul Lane, Bombay. Managing Director—D. N. Shroff. Office—mill premises. 9,800 spindles and 135 looms. Cloth width 27-54 in.

New Hindustan Silk Mills, Narayan Nagar, Agra Road, Ghatkopar, Bombay.

New India Rayon Mills Co. Ltd , Mathurdas Mills Compound, Lower Parel, Bombay. Managing Agents—Sankalchand G. Shah & Co. Ltd., Hanuman Building, Tabakanta, Bombay. Looms—251. Cloth width 26-48 in.

New India Silk Mills, Mathurdas Mills Compound, Lower Parel, Bombay.

New Kaiser-I-Hind Spinning & Weaving Co. Ltd., Gorupdeo Road, Bombay. *See for further particulars in Cotton Section.*

New Mahalaxmi Silk Mills Ltd., (The), Mathurdas Mills Compound, Lower Parel, Bombay. Managing Agents—Dharamdas Hargovandas & Brothers, Delisle Road, Lower Parel, Bombay. Looms—120.

New Manahar Textile Mills Ltd., Agra Road, Ghatkopar, Bombay. Looms—43.

New Oriental Silk Mills Ltd., 48, Dahanukar Building, New Silk Bazar, Bombay. Director—Mangaldas L Patel.

New Prabhat Silk Mills 498, Kalbadevi Road, Bombay. Cloth width 26-45 in

New Shah Silk Mills. Ltd , Khed Gully, off Gokhale Road (South), Dadar, Bombay. Looms—65. Cloth width 44-52 in.

New Sun Mills Co. Ltd., Sun Mills Road, Lower Parel, Bombay.

New Vinod Silk Mills Ltd., (The), Mfg. Directors -- Ramanlal Damodardas Shah, and Mrs. Taramati Ramanlal Shah, Kasturchand Mill Estate, Dadar, Bombay. Looms—90.

Novelty Silk Mills, 466, Kalbadevi Road, Bombay. Mills—Ghodbundor Road, Dahisar (B. S. D.)

Oriental Silk Mills, Nagoo Sayaji Wadi, New Parbhadevi Road, Lower Parel, Bombay.

Panalal Silk Mills Ltd., Atlas Mills Compound, Reay Road, Bombay. Directors—N. M. Shah, S. M. Shah, K. M. Shah and P. M. Shah.

Phoenix Mills Ltd., (The), Tulsi Pipe Line Road, Lower Parel, Bombay. See for further particulars in Cotton Section.

Popular Silk Mills, Sayani Road, Parbhadevi, Bombay. Mg. Agents—Popular Agencies. Office—mill premises. Looms—64. Cloth width 26-58 in.

Raja Industries Ltd., Parsee Panchayat Road, Andheri (East), (B. S. D.) Bombay.

Ramakrishna Silk Mills Co., 529, Kalbadevi Road, Bombay.

Ramjan Naboo Wvg. Factory, Bangalpore, Bhiwandi, Dist. Thana.

Ramlal Silk Mills, 106, Sion Road, near Koliwada Rly. Station, Bombay. Selling Agents—Kundanmal Ramlal, 78-80, New Hanuman lane; Kalbadevi Road, Bombay. Looms—100. Cloth width 26-32 in.

Rayon Wvg. Works, Suryodaya Mills Compound, Block 7A, Tardeo, Bombay 7.

Roop Rayon Mills, Office—Queens Chambers, Queens

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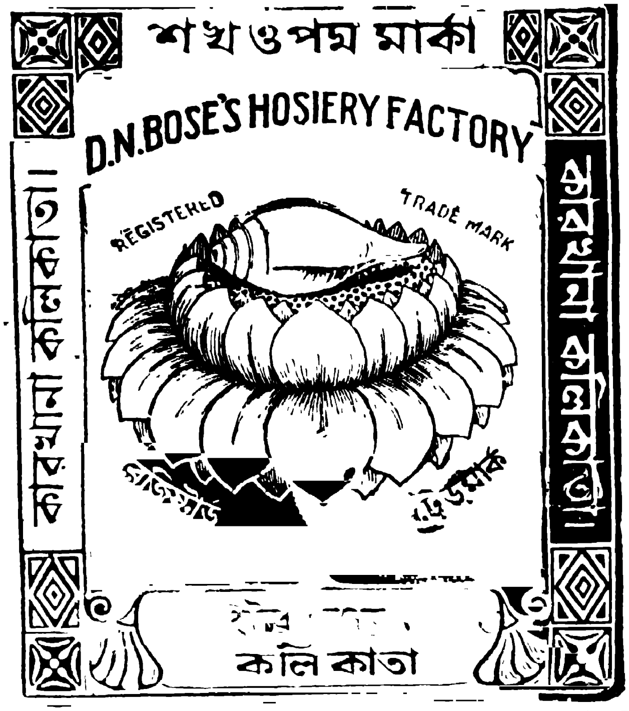

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BOMBAY ISLAND SILK & RAYON MILLS —(*contd.*)

Road, Bombay. Mills—Ambe Vadi, Parel Tank Road, Bombay. Partners—Abdul Sattar Parekh and Ramanlal N. Desai. Looms—57.

R. J. Laxmi Printing Works, Agra Road, Vikhroli, (B.S. D.), Bombay.

Sadhana Textile Mills Ltd., Behind "Nobel Steel Products" off Globe Mills Passage, Worli, Bombay.

The Samartha Engineering & Wvg. Co. Ltd. 404, Delisle Road, Bombay.

Samraat Silk Mills, Agra Road, Vikhroli, Bombay. Props.—P. C. Khanna and S. K. Mehra. Head Office—Jamra Building, Jambulwadi, Kalbadevi, Bombay.

Saraswati Silk Mills, Stock Exchange Building, Apollo Street, Bombay.

Sassoon & Alliance Silk Mill Co. Ltd.. (The), Victoria Road, Mazagaon, Bombay. Selling Agents—Dhanji Mulji, Shamshett Street, Bombay. Mg. Agents—David Sassoon & Co., Ltd., Manekji Wadia Building, 127, Esplanade Road, Fort, Bombay. 350 looms. Cloth width 22-52 in. For further informations see cotton section.

Saudagar Textile Works, Saudagar Mohola, Bhiwandi, Dist. Thana.

Secunder Sari Mills, Bhiwandi, Dist. Thana.

Sharda Silk Mills Ltd., Atlas Mills Compound, Reay Road, Bombay. looms 64.

Shree Ambica Tape Mfg. Co. Ltd., 2nd Floor, Hanuman Building, Tamba Kanta, Pydhonie, Bombay. Cloth width 24-48 in.

Shree Laxmi Silk Mills, (The), Dadar, Bombay. Proprietors—Motilal and Sutaria Bros., Office—Kasturchand mill premises. Dadar, Bombay. 108 looms. Cloth width 24-50 in.

Shree Samartha Textile Industries, Fergusson Road, Lower Parel, Bombay. Cloth width 28 52 in.

Shree Shakti Mills Ltd., Haines Road, Mahalaxmi, Bombay. Office—Podar Chambers, Parsi Bazar Street, Fort, Bombay. Mg. Agents—Podar Sons Ltd., 300 looms.

Silk Processing & Lace Mills, Suryodaya Mill Compound, Tardeo, Bombay.

Shree Shanti Silk Mills, Lalchimney Compound, 32F, Lamington Road, North Bombay. 20 looms.

Sir Shapurjee Broach Mills Ltd., 15A, Elphinstone Circle, Fort, Bombay. See for further particulars in cotton section

Standard Mills Co. Ltd., 29, Churchgate Street, Fort, Bombay.

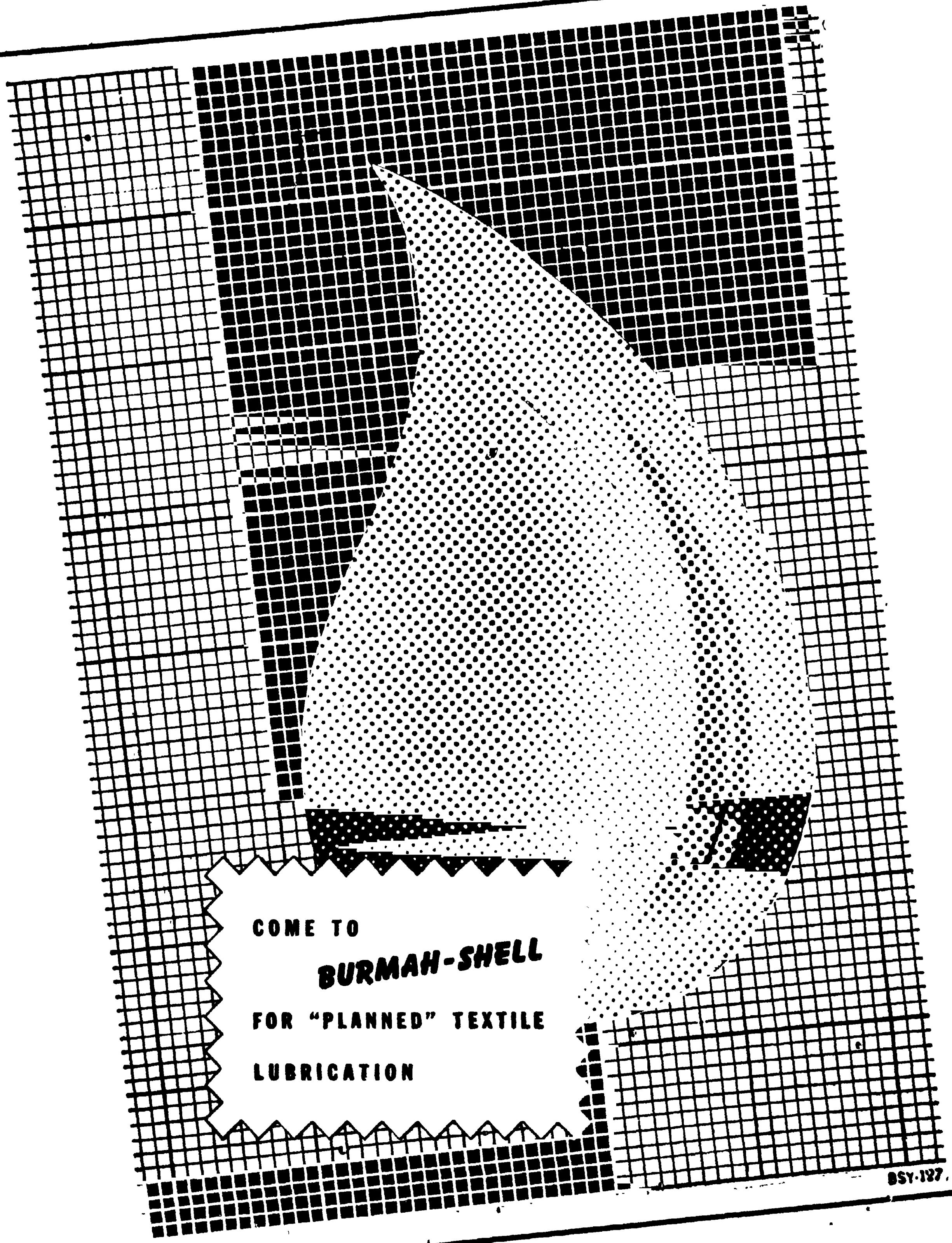
Suryakant Textile Mill, Framji Petit Mills Compound, Reay Road, Mazagaon, Bombay.

Swastik Silk Weaving Mills, Fergusson Road, Lower Parel, Bombay.

United Rayon Mills Ltd., Near Elphinstone Bridge, Parel, Tank Road, Bombay.

Venus Silk Mills, Suryodaya Mills Compound, Tardeo, Bombay. 48 looms. Cloth width. 26-42 in.

Vijay Silk Mills, Atlas Mill Compound, Reay Road, Bombay.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BOMBAY PRESIDENCY

Adarsha Weaving Mills, Billimora.

Ahmedabad Fine Weaving Works, Ahmedabad.

Ahmedabad Jyoti Silk Mills, New Cotton Mills No. 1 Compound, Outside Raipur Gate, Ahmedabad.

Ambica Weaving Factory, Salabatpura Main Road, Surat.

Amrutlal Sanmukhlal Silk Weaving Factory, Inderpura, Kshatriawad, Surat.

Artex Mfg. Co, New Cotton Mills, No. 1 Compound, outside Raipura Gate, Kankaria Road, Ahmedabad.

Aurangabad Silk Mills, Aurangabad. Proprietors—Abdul Hamid Khan and Abdul Majid Khan. Cloth width 27-54 in.

Aziz Silk & Cotton Factory, Gulambaba Mills Compound, Station Road, Surat. 66 looms. Cloth width 27-45 in.

Bagyanagar Weaving Works, Sultan Bazar, Hyderabad City.

Bechardas Manekchand Kharwar Weaving Factory, Surat.

Bechardas Spinning & Weaving Mills Co. Ltd., Raikhad, Ahmedabad. See in Cotton Section.

Bhagubhai Dahyabhai Gajiwala Weaving Factory, Kala Mehta's Street, Sagrampura, Surat.

Bhagwandas Nathubhai Weaving Factory, Surat.

Bhalakia Mills Co. Ltd., P. O. Box No. 29, Ahmedabad.

Bhavnagar Rayon Mills Ltd., (The), Bhavnagar, Saurashtra. Managing Director—Vinodchandra S. Shah. Office and No. 1 factory address—near Patel House, No. 2 factory—Nari Road, Bhavnagar. 275 looms. Cloth width 26-50 in.

B. M. Kharwar Wvg. Factory, Limda Chowk, Surat. Looms—24.

B. Nagindas Kharwar Bros., Limda Chowk, Surat.

Bunki Silk Mills, Zunda Sheri, Sagrampura, Surar.

Champaklal & Bros. Wvg. Factory, Surat.

Chandulal Mancharam Wvg. Factory, Surat.

Chimanlal Chotalal Silk Wvg. Factory, Surat. Looms—44. Cloth width 26-34 in.

Chunilal Harjiwandas Dhamanwala Rustompura Wvg. Factory, Surat.

Chunilal Parshotamdas Goranwala. Surat.

City Of Ahmedabad Spg. & Mfg Co. Ltd., (The), Kankaria Road, Ahmedabad. *See for further Particulars in Cotton Section.*

Crown Silk and Rayon Mill, (The), M. R. Colony, Railwaypura, Ahmedabad. Mg. Agents—J. Kimatrai & Co., Office—mill premises. Spindles—4,000. Selling Agents—J. Kimatrai & Co., New Silk Bazar. Kalbadevi, Bombay.

Dhamanwala Textile Mills, Lal-Darwaja, Station Road, Surat. Partners—Mohanlal C. Dhamanwala, Vrajlal M. Dhamanwala, Parashottamdas M. Dhamanwala, Jayantilal M. Dhamanwala. Looms—160. Cloth width 27-60 in.

Dhanamall Silk Mills, Varachha Road, Surat. Proprietor—Seth Pessumal D. Aswani. Looms—217. Cloth width 27-45 in.

Diamond Silk & Rayon Mill, Madhobhai Colony, Railwaypura, Ahmedabad. Looms—50. Selling Agents J. Kimatrai & Co., Bombay.

Gaekwar Mills Ltd., Billimora. Looms—100. *See for futher Particulars in Cotton Section.*

Garden Silk Wvg. Factory, Rampura Tunki, Surat. Partners- Dr. Amichand C. Shah, Prakashchandra A. Shah and Sureshchandra A. Shah. Looms—69. Cloth width 36-56 in. 2,360 spindles. Selling Agents—Chhotalal Premchand & Co., 77, Mirza Street, Parsee Galli, Bombay, and V. D. Kharwar Bros., Harun Buildings, 188, Princess Street, Bombay.

Ghanti Silk Mills, Salabatpura, Khangad Sheri, Surat.

Ghariwala Durlabhram Narbheram Weaving Factory, Surat.

Ghariwala Weaving Factory, Salabatpura Tad Street, Surat. Partners—Tulsidas Chunilal Ghariwala, Thakordas Chunilal Ghariwala, Parbhuram Chunilal Ghariwala, Uttamram Chunilal Ghariwala. Selling Agents—Chunilal Parsotamdas Ghariwala,

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BOMBAY PRESIDENCY SILK & RAYON MILLS—(*contd.*)

Salabatpura, Tad Street, Surat. 49 looms. Cloth width 27—45 in.

Ginwala Silk Mills, Ankleswar, Dist. Broach.

Gopal Mills Co. Ltd., (The), Mahatma Gandhi Road, Broach. *See for further particulars in Cotton Section.*

Hathiwala Silk Mills, Begumpura, Surat. 201 looms. Cloth width 27—40 in. Selling Agents—Hathiwala Cloth Mfg. Co , Bombay.

Hathiwala Textile Mills, Begumpura, Surat. Cloth width 27—56 in. Selling Agents—Manchharam Ramchandra & Co., 165, Lohar Chawl, Amrit Nivas, Bombay.

Hathiwala Weaving Mills, Begumpura, Surat. Cloth width 27—36 in.

Hindi Fabrics Weaving Factory, Rampura Ram Bag, Surat. Office—Lal Darwaja Gundi Sheri, Surat. Proprietors—Hiralal Manchharam & Sons Ltd., Cloth width- 27—36 in.

Hyderabad Silk Mills, Mushirabad.

Jaswant Weaving Factory, Ahmedabad

Jeramdas Narandas Weaving Factory, Surat.

Kalidas Hargowandas Silk Weaving Factory, Surat.

Kalyan Weaving Factory, Station Road, Hatim Mills Compound, Surat.

Kanti Silk Mills, Delhigate Falsawadi, Surat. Office—Nawapura Kurwa Road, Surat. Proprietor—Kantilal Jekisondas Vakharia. 88 looms. Cloth width 26-50 in.

Kashiram Jagdish Weaving Factory, Salabatpura, Khargad Sheri, Surat.

Keshav Silk Factory, Salabatpura, Shidhi Sheri, Surat.

Kismat Silk Mills, Shree Industrial Mills Estate Compound, Gomtipur Road, Ahmedabad.

Kohinoor Weaving Factory, Surat.

Kshatri Jekisondas Bhukondas, Limda Chowk, Chanchwa Sheri, Surat.

Laxmi Narayan Silk Mills, Ahmedabad.

Laxmi Silk & Cotton Mills Ltd., Surat.

Laxmi Weaving Factory, Laldarwaja, Gundi Sheri, Surat. Selling Agents—V. D. Kharwar Bros., Bombay, and J. C. Madrasi, Bombay. Cloth width 46—47 in.

Mafatlal Fine Spinning & Manufacturing Co. Ltd., Navsari See entry in Cotton Section.

Maganlal Shivlal Silk Weaving Factory, Surat.

Mahabir Silk Factory, Azamabad.

Mahalaxmi Mills Ltd., Bhavnagar (Saurashtra). Agents—Hargovandas Jivandas & Co. Ltd., Bhavnagar. 120 looms. See entry in Cotton Section.

Maharana Mills Ltd., Porbunder (Saurashtra) 205 looms, 12 throwing machines each of 200 spindles. See entry in Cotton Section.

Mahavir Silk Mills, Agra Road, Kalyan. 65 looms.

Mahendra Silk Mills Ltd, Madhowlal Ranchhodlal Colony, Ahmedabad. 150 looms. Cloth width 26-45 in.

Master Silk Mills Ltd., (The), near Chavdi Gate, Bhavnagar, Saurashtra. Managing Director—Ramaniklal Bhogilal Shah. Office—mill premises. 180 looms Cloth width 36 60 in.

Mayur Silk Industries, Morvi, Saurashtra.

Mohanlal Maneklal Chevli Weaving Factory, Surat.

Mohanlal Vallabhram Bunki,—Zunda Sheri, Sagrampura, Surat.

Monco Silk Mills, Begumpura, Chidia Kui, Surat. Selling Agents—Mohanlal & Co., 418, Kalbadevi Road, Bombay.

Mulchandbhai Harkisondas Topiwalla Weaving Factory, Surat.

Nagindas Chunilal Mathavala Weaving Factory, Anavil Sheri, Sagrampura, Surat.

Nanikram Sobhraj Mills Ltd, Madhowlal Ranchhodlal Colony, Railwaypura, Ahmedabad. Mg. Agents—J. Kimatrai & Co., Bombay. 206 looms. See entry in Cotton Section.

Narendra Silk Mill, Surat.

Nathubhai Vallabhbhai Kadiwala Weaving Factory, Surat.

National Fancy Yarn Mill, Surat.

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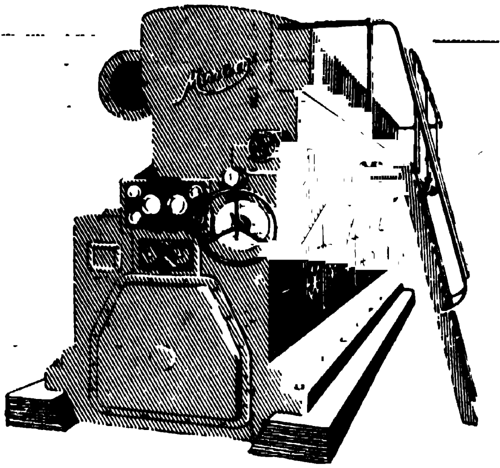

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Natvarlal Manchharam Jariwala Textile Weaving Factory, Sagrampura, Sir Dehlvi Road, Surat.

Navjivan Silk Mills Ltd., Naroda Road, Ahmedabad. Cloth width 26-45 in.

Navsari Cotton & Silk Mills Ltd., (The), Navsari, B. B. & C. I. Rly., Managing Agents—H. M. Mehta & Sons Ltd., Office—mill premises. 408 spindles, 96 looms. For further particulars see entry in Cotton Section.

Nawabharat Silk Factory, Bharatkhand Cotton Mills Compound, Block No. 36, Ahmedabad. Proprietor—Navinchandra Mohanlal. Cloth width 27-58 in. Selling Agent—Saremal Chunilal.

New Laxminarayan Mills, Madhobhoy Colony, Railwaypura Post, Ahmedabad. Proprietors—Seth Rijhomal Valiram and Seth Hiranand Valiram Office—mill premises. Selling Agents—Valiram Sons, Kalbadevi Road, Bombay 2. 125 looms.

Pankaj Weaving Mills, (The), Begumpura Chevli Street, Surat. Proprietor—T. H. Chevli. Selling Agent—Tulsidas Harkisandas Chevli, M. J. Market, Govind Chowk, Bombay. 100 looms. Cloth width 27-44 in.

Prabhat Silk & Cotton Mills Ltd., Outside Shera Gate, Surat. 72 looms Cloth width 26-48 in Selling Agents—V. D. Kharwar Bros., 188. Harun Building, Princess Street, Bombay.

Prabhudas Gangadas Silk Wvg. Factory, Surat.

Ramchand Vanamalidas Kadiwala Wvg. Factory, Surat.

Ramesh Silk Mills, Station Road, Cambay.

Ratago Silk Wvg. Factory, Limda Chowk, Ghanti Sheri, Surat.

Rohit Mills Ltd., (The), near Khokhra Mehmdabad, Maninagar, Ahmedabad. Mg. Agents—Lallubhai Gordhandas Ltd., Office—mill premises. Looms—732. *For further particulars see in Cotton Section.*

Saber Silk Mills, Valasana, Via-Vadnagar, N. Gujerat,

Sanmukhlal Jaikisondas S. W., Indarpura, Khatri Wadi, Surat.

Secunder Sari & Silk Mills, Bhiwandi, Dist. Thana. Proprietor—Abdulqadir Secunder Patel. Office—mill premises. Looms—125 *For further particulars see in Cotton Section*

Shree Ambica Wvg. Works, Sati Mata Seri, Ragunathpura, Surat. Partners—Hiranand N. Khawani, Jamnadas A. Punjabi and Parshotamdas H. Punjabi. Looms—25. Cloth width 27-42 in.

Shree Harshad Textile Mills Ltd., P. O. Box 50, Jamnagar, Saurashtra. *For further particulars see Cotton Section.*

Shree Nirvan Silk Wvg. Factory, Chevli Street, Surat. Partners—Bhukhandas Dahyabhai Chevli and Nagindas Dahyabhai Chevli. Looms—51. Cloth width 27 40 in. Selling Agents—Dahyabhai Gopaldas Chevli, Begumpura Chevli Street, Surat.

Shree Sudershan Silk Mills Ltd., Sharkarshet Road, Poona. Mg. Agents—Rathi Brothers Ltd., Kapadgunj, Poona. Office—mill premises. Looms—35. Cloth width 40-54 in.

Shri Gajanan Mills, Sangli. Proprietor—V. R. Velankar. Office—mill premises. Spindles—5,276, Looms—143.

Standard Silk Mills, Laldarwaja, Vartaldevdi Road, Surat. Office—Navapura, Kurwa Road. Mg. Agents—Jayantilal G. Vakaria. Spindles—2,000, Looms—100. Cloth width 26-60 in. Selling Agents—Jayantilal G. Vakaria, No. 1, Tawkwadi Resham Bazar, 483 85, Kalbadevi Road, Bombay.

Surat Silk Goods Mills, Prop.—J. L. Vakharia, Salabatpura, Vijay Baug, Surat. Spindles—5,500, Looms—175. Cloth width 26-58 in.

Surat Silk Wvg. Factory, Rustompura, Swami Bag, Man Darwaja, Surat. Spindles—400, Looms—60. Cloth width 26-34 in.

Suryaprakash Wvg. Factory, Nirvan Bava Akbada, Begumpura, Surat. Partners—Lallubhai Dayaram Chevli, Harilal Dayaram Chevli, Surajram Dayaram Chevli, Maneklal Dayaram Chevli, Begumpura Chevli Street, Surat. Looms—151. Selling Agents—Dayaram Harkinsondas Chevli, Begampura, Chevli Street, Surat.

Sutaria Silk Wvg. Factory, Ahmedabad.

Swadeshi Wvg. Mills, (The), Opp. Electric Power House, Panvadi Road, Bhavnagar. See further particulars in Cotton Section.

Tulsidas Chunilal Chariwala Wvg. Factory, Surat.

BOMBAY PRESIDENCY SILK & RAYON MILLS—(*contd.*)

Uma Silk & Cotton Works, Ambaji Road, Nani Chipwadi, Surat.

Uttam Rayon Mills, Hiramondi Street, Sagrampura, Surat.

Uttamram Maneklal Bardoliwala Silk Factory, Surat.

Vakharia Brothers, Navapura, Kurwa Road, Surat. Proprietors—H. T. and N. T. Vakharia.

Vania Silk Mills Ltd, Billimora.

Vasant Textile Works, Sagrampura, Zunda Shori, Surat.

Vasant Weaving Factory, Gundi Sheri, Laldarwaja, Surat.

Vijaya Mills Co. Ltd., Naroda Road, Ahmedabad. *See entry in Cotton Section.*

Viramgam Silk Mills, High School Road, Viramgam, Saurashtra.

Warangal District Jail Factory, Warangal.

DECCAN

Jiwan Textile Mills, (The), Patarghatti, Hyderabad. Mg. Proprietor—R R Jiwanlal. Office—mill premises. Looms—62.

MADHYA BHARAT

Binod Mills Co. Ltd., Ujjain. *See entry in Cotton Section.*

KASHMIR

Amar Silk Fabrics, Srinagar. Office Sathu Road, Srinagar. Proprietors—L Kidar Nath, L. Amar Nath, L. Brij Mohan, L. Nand Kishore. Selling Agents—Kanshi Ram Kidar Nath, Bombay, Delhi and Amritsar. Cloth width 27-64 in.

MADRAS

Bharat Silk Textiles, No. 4, Brough Road, Erode.

Government Silk Filatures, Kollegal, Coimbatore. Managed by the Department of Industries & Commerce, Madras.

Jayanthi Ramchandrappa Setty Mills Ltd., Rayadrug, Bellary Dist. *For further particulars see Cotton Section.*

Kerala Weaving Co., (The), P. O. Chovva, Dist. Malabar. Ry. Stn. Cannanore South, S. I. Ry.

Madras Silk & Rayon Mills Ltd., 3, Brightons Road, Vyasarpadli, Perambur Barracks, Madras.

Prasanna Nageswara Twisting Mills, Kollegal, Coimbatore.

Rajeswari Mills Ltd., Gudiyattam (N. A. Dist). Managing Agents—Gudiyattam Textiles Ltd, P. O. Box No. 15. *See entry in Cotton Section.*

South India Silks Ltd. Gudiyattam. Managing Director—Sri K. R. Raja Reddy. Selling Agents—Delhi-Indian Textile Corporation, K. Hassaram Export Agency (India); Bombay—Cmmercial Traders, Gokaldas Vallabhadas, V. Mansuklal & Co., Madras—Noor Abdul Gafoor & Sons, 2, Godown Street.

Sri Dhanalakshmi Silk Factory, Peddapuram, East Godavari. Proprietors—Balla China Kamaraju & Co, Peddapuram.

Sri Lakshmi Silk Manufacturing Works, Peddapuram, East Godavari.

Sri Padma Silk Mills Ltd., Kathrivedu Village, near Red Hills, Madras. Office—First Floor, Vanguard House, 11/12, Second Line Beach, Madras. Mg. Agents—Muthu Arunachalam & Co. Ltd.

Sri Rama Silk Factory, Peddapuram, East Godavari.

Tirumurthy Textiles Ltd., (The), Office—5, Double Mall Street, Teppakulam Post, Tiruchirappalli Mg. Agents—Gurumurthy& Co, 5, Double Mall Street, Tiruchirappalli. *For further particulars see in Cotton Section.*

MYSORE

Ananda Weaving Factory, Bangalore City.

Bangalore Woollen, Cotton & Silk Mills Co. Ltd. Bangalore City. Mg. Agents—Binny & Co. (Madras) Ltd., Agraram Road, Bangalore City. *For further particulars see Cotton Section.*

Desi Textile Mills, Mysore Road, Bangalore City.

Dhondusa (S) Gold Thread Factory, 167, Subedar Chatram Road, Bangalore. Proprietor—S. Dhondusa. Spindles—1,400, Looms—43. Cloth width 30-50 in.

Gangadhariah's B. Weaving Factory, Dodballapur.

Government Silk Filature, (The), Kankanhalli P. O, Mysore.

Goverment Silk Weaving Factory, (The), Mysore. Owned and controlled by the Government of Mysore. Selling Agents—The Mysore Products Ltd., 191, Princess Street, Bombay. Gokalchand Khanna & Co., 222, Katra Nil, Chandni Chowk, Delhi; Karnatic Agencies Ltd., Netaji Subhas Road, Calcutta and V. Akambara Chetty & Sons, "Chetty Hall," Commercial Street, Bangalore. Looms—46. Cloth width 36-45 in.

Hanumanthappa's Silk Weaving Factory, Bangalore City.

Kabadi Shankarsa & Sons Silk Twisting Factory, 74, Rangaswamy Temple Street, Bangalore City.

Khabadi Chicknagusa Silk Throwing & Lametta Factory. Bangalore City.

Khoday Eswarsa Silk Throwing Factory, Bangalore City.

Muddiah & Sons Silk Winding & Twisting Factory, Bangalore City.

Mysore Hosieries & Silk Factory Ltd., Mysore Road, Bangalore. Mg. Agents—J. D. Italia. Office—mill premises. 10 Looms with 18 hosiery machines. Selling Agents—M. R, Chhotalal & Co., 361, Chickpet, Bangalore City.

Mysore Silk Factories Ltd., T. Narasipur, Mysore Dt. Factories also at Chamarajanagar, Kuderi, Santhemarahalli, Mamballi and Sidlaghatta.

Mysore Spun Silk Mills Ltd., Channapatna. Spindles – 6,400 ring, 750 cap and 2,700 doubling.

Shri Rama Silk Mills Ltd, Mg. Agents—N. G. Naik & Co. Ltd., Office—"Shree-Ram-Bagh", Bangalore. Stockists—The Bombay Swadeshi Co-op. Stores Co. Ltd., Western India House, Sir Phirozeshah Mehta Road, Fort, Bombay. 5,000 Spindles, 35 Looms. Cloth width 28-54 in.

Silk Throwing & Weaving Factory, (The), Mamballi. Proprietor Sowcar M. S. Basavannadevaru. Cloth width 27-54 in.

Sree Champakadama Silk Throwing & Weaving Factory, 914, Nagarathapet, Bangalore, Proprietor—P. Mudduramaiah Chetty Sons, Chickpet, Bangalore. 656 Spindles, 24 Looms.

Sreenivasa M. & Co., Bangalore City. 2,000 Spindles, 5 Looms. Cloth width 36-45 in.

Sri Anjaneya Wvg. Factory, Bangalore City.

Sri Laxmi Venkateswara 'Silk Throwing Factory, Bangalore City.

Sri Rama Wvg. Shed, (The), Hardinge Road, Basauanagudi Post, Bangalore City. Mg. Agents—R. A. Subramanyam, P. Subbaram Chetty. Office - mill premises. Selling Agents—P. Subbaram Chetty & Bros., Chickpeth, Bangalore City. Spindles—1,100. Cloth width 28-60 in.

Srinivasa Wvg. Factory, Bangalore City.

Tata's Experimental Silk Farm, Bangalore. Proprietors —O. Tata & Sons, Bangalore City.

Messrs. Thackersey Mooljee & Co.

"SIR VITHALDAS CHAMBERS"
16, APOLLO STREET, FORT, BOMBAY.

Telegraphic Address :	Telephone Numbers :
"DRAGONNADE"	20110
"LOLLARDISM"	20110
"DISPARAGAR"	20110
"CROWNMILL"	25153

⁂

The Hindoostan Spg. & Wvg. Mills Company Limited.
Agents : Thackersey Mooljee & Co.

⁂

The Western India Spg. & Mfg. Company Limited.
Agents : Thackersey Mooljee Sons & Co.

⁂

The Indian Manufacturing Company Limited.
Agents : Damodher Thackersey Mooljee & Co.

⁂

The Crown Spinning & Manufacturing Co. Limited.
Agents : Purshotam Vithaldas & Co.

LONGCLOTH : SHIRTING : DHOTIES :
and
SAREES : CHECKS : SUCIES.

NJAB

Allied Commercial Co., 116, Chandi Chowk, Delhi.

Amritsar Rayon & Silk Mills Ltd., G. T. Road, opp. Terminal Tax Barrier, Amritsar. Office—mill premises. *For Full particulars see Cotton Section.*

Amritsar Swadeshi Woollen Mills Ltd., G. T. Road, Amritsar.

Balaki Ram Bal Kishan Textile Mills. Katra Jallianwala, Amritsar.

Ball Silk Wvg. Co (The), Cinema Road, Ludeiana. Looms—150. Cloth width 27-45 in.

Bandlis Mills, Ludhiana. Mg. Agents—Vidya Sagar & Anand Sagar.

Behl Textile Mills, Lohari Gate, Amritsar.

Bharatuddhar Cloth Mfg. Co., Gheemandi Gate, Amritsar.

Delhi Silk & Woollen Mills, Delhi.

Dhown Textile Mills, Hall Gate, Amritsar.

Fancy Silk & Smallware Wvg. Mills Ltd., Khyber Pass, Civil Lines, Delhi.

Gobind Woollen & Silk Mills, Islamabad, Amritsar.

Hansa Cloth & General Mills, Verka, Amritsar,

Hansraj Mills, Gheemandi Gate, Amritsar.

Hanuman Textile Mills, G. T. Road, Putlighar, Amritsar.

Hari Silk & Woollen Mills, Amritsar.

Harnam Mills, Dhabkatikan, Amritsar.

Hindusthan Rayon & Woollen Textile Mills Ltd., Chheharta, Amritsar. Selling Agents—Ram Singh & Co., Chowk Darbar, Amritsar.

Hira Woollen & Silk Mills, Inside Gheemandi Gate, Amritsar. 88 Looms. Cloth width 27-54 in. Selling Agents—Jairamsingh Sarnagat Singh, Amritsar and Bombay.

Indian Woollen & Silk Mills, Amritsar. Proprietors—Chunilal Munilal & Co., Office—Seth mills Post Office, G. T. Road, Amritsar. 88 Looms. Cloth width 27-54 in. Selling Agents—Chunilal Munilal & Co., Bazar Sabunian, Amritsar.

Jagan Nath Payare Lal Silk Factory, Ludhiana.

Kailash Textile Mills. Chowk Khalsa College, Amritsar.

Kapur Silk Weaving Mills, (The), G. T. Road, Amritsar.

Kashmir Woollen Mills, G. T. Road, Amritsar. Selling Agents—Ramdhan Shibdass, 4, Manohardass Street, Calcutta.

Khanna Silk Mills, Batala Road, Amritsar. Proprietors—Brijlal Khanna, Ramchand Khanna, Madanlal Khanna. Office—mill premises and New Silk Bazar, Bombay.

Khushiram Dwarkanath Weaving Mills, Lawrence Road, Amritsar. Cloth width 27-54 in. Selling Agents—Bhag Mal Satya Paul, Katra Chohan Chandni Chowk, Delhi.

Krishna Textile Mills, P. O. Khalsa College, Amritsar.

Madan Woollen & Silk Mills, Ramtirath, Amritsar.

Maharaj Wvg. Mills, Lawrence Road, Amritsar.

Mehra Textile Mills, (The), Jail Road, Amritsar. Mg. and Selling Agents—Diwan C. Mehra & Co., Katra Ahluwalia, Amritsar. Looms—121. Cloth width 24-60 in.

Model Woollen & Silk Mills, Verka, Amritsar. Proprietors—Lala Kidar Nath, Lala Amar Nath, Nand Kishore and Brij Mohan. Office—Katra Ahluwalia, Amritsar.

Modern Textile Mills Ltd., Verka, Amritsar.

Mohan Mfg. and Trading Co., Inside Sultanwind Gate, Amritsar.

Nath Textile Mills, G. T. Road, Amritsar. Mg. Agents—P. N. & S. N. Kapur. Office—mill premises.

Om Prakash Mills, Amritsar.

Parkash Textile Mills, Hide Market, Amritsar.

Prabhat Textile Mills, G. T. Road, Amritsar.

Prabhu Woollen & Silk Mills, Malvia Bunga, near Clock Tower, Amritsar.

Prem Textile Mills, Putlighar, Amritsar, Proprietor—Mela Ram Lachman Das. Managing prop—Jagdish Chand Kapoor.

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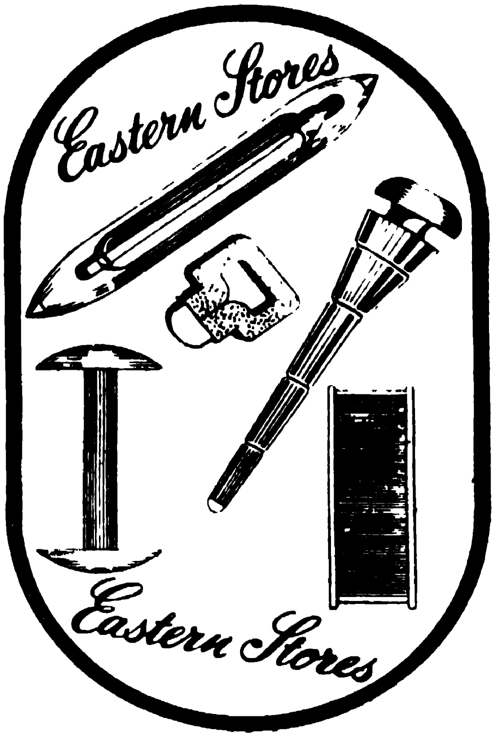

We Stock :-

SHUTTLES, PIRNS, BOBBINS, STEEL REEDS, WIRE AND COTTON HEALDS, PICKING BANDS, ROLLER SKINS, BUFFERS AND ALL SORTS OF MILLS & HANDLOOM ACCESSORIES.

LOOMS
of all descriptions
are always available at marketable price.

PUNJAB SILK & RAYON MILLS—(*contd.*)

Punjab Cloth Mills Ltd, Pulbangash, Delhi. Office—mill premises.

Punjab Woollen Mills, G. T. Road, Amritsar.

Pyareylal Bansal & Co., Ludhiana.

Rama Textiles, Nicholson Road, Delhi. Cloth width 42-43 in.

Seth Spinning Mills Ltd., (The), Chheharta, Amritsar. Office—mill premises.

Sharma Weaving Factory, Delhi.

Shree Radha Textile Mills, Putlighar, Amritsar.

Swastika Textile Mills, Chowk Khalsa College, Amritsar.

Talwar Textile Mills, Ludhiana.

Thakar Textile Mills, Katra Naurian, Ludhiana.

Veri dra Textile Mills, Putlighar, Amritsar.

Vijay Bharat Weaving Factory, Amritsar.

Vij Textile Mills, Shree Chander Nagar, Taran, Amritsar

Vohra Textile Mills, Islamabad, Amritsar.

RAJASTHAN

Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd., P. O. Jiyajeerao Mills, Gwalior.

Hindusthan Silk Mills, opp. Railway Goods Office, Station Road, Ajmer—Partners. R.B.D.H. Hiarandani, Sri Bhagwandas J. Masand, Sri K. H. Lalvani, looms—10, Cloth width 27-33 in. Selling Agents—Laxmi Emporium, opp. Strand Cinema, Colaba, Bombay.

K. J. Textile Mills, Pushkar Road, Ajmer. proprietor—Vishnu Chandra. Office—behind Pal Beechla, Srinagar Road, Ajmer.

TRAVACORE

Travancore Rayons Ltd., **(The)**, Rayonpuram, Perambavoor P.O., North Travancore.

UTTAR PRADESH

Benos Sericum Ltd., Durgakund Road, Banaras, Mg, Agents—J K. & Company Office—Gaighat, Banaras Counts 13/15, 16/18, 24/28, 18/ 0, and 22/24. Cloth width 32-54 in.

Cawnpore Lace Works Ltd., 14/5, Civil Lines, Kanpur.

Chowks Silk Wvg. Factory, Shahjahanpur.

Dayalbagh Textiles Mills Ltd., Dayalbagh, (Agra). Office—mill premises. Looms—72.

Dewan Balmukandmall Silk Mills, Lakhichotra, Banaras.

Dharapur Silk Factory (The), Pratapgarh, Proprietor—O. Raja of Kalalankar.

Imperial Silk Dying & Weaving Works, Shahjahanpur.

Nand Gopal Madhusudandlal Silk Mills, Jalpaganj, Banaras.

Silk Weaving Factory, 12 Bagh Sundudas, Banaras.

Swadeshi Silk & Bibbon Mills Co., Banaras.

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* * *

Mill No 1
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Telephone : SOUTH 2050.

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4, Nilgunj Road,
Belgharia.
Telephone : B B. 5655

THE BURHANPUR TAPTI MILL

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Cook's Building, 324, Hornby Road, Fort, BOMBAY.

The Mill is equipped with 31,800 Spindles and 730 Looms, Also Art-silk Looms

Mill Manufactures :

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ALL ARTSILK SUPERIOR QUALITY

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WOOLLEN & WORSTED MILLS IN INDIA

WEST BENGAL

Bharat Woollen Mills Ltd., 11, Esplanade East, Calcutta.

Blanket Manufacturing Co., 2, Roberts Road, Dum Dum Cantt, Dum Dum.

BIHAR

Bhagalpur Central Jail Works, Bhagalpur.

BOMBAY

Ahmed Woollen Mills, Ambernath, Bombay. Proprietors—Ahmed Abdul Karim Brothers Ltd., Karim Building, Mohamedali Road, Bombay.

Bombay Woollen Mills, (in association with India Woollen Textile Mills, Chheharta), Thana, Bombay.

Bombay Woollen Mills Ltd, Proprietors—Bombay Hosiery Works Fattory, Mogul Lane, Lady Hardinge Road, Matunga, Office address—Wakefield House, Sprott Road, Ballard Estate, Bombay.

Eastern Woollen Mills Ltd, Bhawanishanker Road, Dadar, Bombay.

Indian Woollen Mills, Branch of Sir Shapurji Broach Mills Ltd., Haines Road, Mahaluxmi, Bombay. Head Office—15-A. Elphinstone Circle, Bombay.

Krishna Woollen Mills. Albert Building, Hornby Road, Bombay. 15 hand looms.

Nagpal Woollen Mills, 9/11, Picket Cross Road, P. O. 2, Bombay.

Raymond Woollen Mills Ltd., Thana. Mg. Agents—J. K. (Bombay) Ltd., Dougall Road, Ballard Estate, Bombay. 17,300 Woollen Spindles (2,880 mule, 10,400 ring, 4,020 doubling), 196 power and 25 hand looms.

Shree Digvijaya Woollen Mills Ltd., Bedi Bunder Road, Jamnagar, Saurashtra. 7,000 Worsted Spindles, 2,000 Woollen Spindles, 100 Looms.

Shri Dinesh Mills Ltd., Padra Road, Baroda. Mg. Agents—Maganlal Bhikhabhai Ltd., Office—mill premises.

Textile Fabrics Ltd., Mubarak Manzil, Apollo Street, Bombay.

KASHMIR

Rajkumar Woollen Mills, Jammu.

Shree Karan Singh Woollen Mills Ltd., "Shirin Bagh" Srinagar.

Tej Industries Ltd., Post and Tel. Office—Srinagar.

MADRAS

Balaramiah K. S. & Co. Kithchipalayam, Salem.

Central Jail Manufactory of Woollen Carpets, Tents & Coarse Towels, Bellary, Madras.

Ibrahim E. D. Mohamed & Co., Carpet Weaving Factory, Kithchipalayam, Salem.

MYSORE

Anantharamiah Woollen & Cotton Works, Main factory—Mysore Road, Bangalore.

Bangalore Woollen, Cotton & Silk Mills Co. Ltd., Bangalore City. Mg. Agents-Binny & Co. (Madras) Ltd., Agraram Road, Bangalore City.

Subbayah & Sons, Seshadripuram, Malleshwaram P. O., Bangalore.

Sri Mahalaxmi Woollen & Silk Mills Ltd., Yesvanthpur.

EAST PUNJAB

Amritsar Rayon & Silk Mills Ltd., G. T. Road, opposite Terminal Tax Barrier. No. 1, Amritsar, Punjab.

Amritsar Swadeshi Woollen Mills Ltd, Grand Trunk Road, Amritsar.

Ashok Woollen Mills, Queens Road, Amritsar.

Balakiram Balkishan Mills. Katra Jallianwala, Amritsar.

EAST PUNJAB WOOLLEN & WORSTED MILLS (*contd.*)

Bharat Uddhar Cloth Mfg. Co., Outside Ghee Mandi Gate, P. B. No. 51, Amritsar.

Delhi Silk & Woollen Mills, Delhi.

Government Woollen Industries Development Centre, Panipat.

Greater India Spinning & Weaving Mills Ltd., Millar Gunj, Ludhiana, East Punjab.

Hari Silk & Woollen Mills, Amritsar.

Haryana Woollen Mills, Panipat.

Hindustan Rayon & Woollen Textile Mills Ltd. Chheharta, Amritsar.

Hira Silk & Woollen Mills, Amritsar.

India Woollen Textile Mills, G. T. Road, Chheharta (E P. Rly.)

Indian Woollen & Silk Mills, Amritsar. Proprietor-Chunilal Munilal. Office address—Seth Mills Post Office, G. T. Road, Amritsar.

Kanshi Ram Kidar Nath, Katra Ahluwalia, Amritsar.

Kashmir Woollen Mills, G. T. Road, Amritsar.

Mehra Textile Mills, Jail Road, Amritsar.

Model Woollen & Silk Mills, Verka, Amritsar.

Modern Textile Mills Ltd., Verka, Amritsar.

Mohan Mfg. and Trading Co., mills Inside Sultanwind Gate, Amritsar.

Nanu Mall Amar Nath, P. O. Panipat, Dist Karnal.

Nath Textile Mills, G. T. Road, Putlighar, Amritsar.

National Industrial Corporation, G. T. Road, Panipat.

New Egerton Woollen Mills, Dhariwal, Branch of The British India Corporation Ltd., Kanpur.

Oriental Carpet Manufacturers (India) Ltd., Chheharta, Amritsar.

Oswal Woollen & General Mills Ltd., G. T. Road, Ludhiana.

Panipat Woollen Mills, Co. Ltd., Kharar, District Ambala, East Punjab.

Panipat Woollen Mills, Kharar, Ambala.

Prakash Textile Mills Ltd., G. T. Road, P. O. Asr Cotton Mills, Amritsar.

Prabhat Textile Mills, G. T. Road, Amritsar.

Prabhoo Woollen & Silk Mills, Chheharta.

Prem Textile Mills, Pulbangash, Delhi.

Prem Textile Mills, Putligar, Amritsar.

Punjab Woollen Mills, G T. Road, Amritsar.

Raj Spinning Mills, Amritsar.

Raj Woollen Industries, G. T. Road, Panipat, Dist. Karnal.

Seth Spinning Mills Ltd., Chheharta (E P. Rly.)

S. N. S Woollen Mills, Jain Street, Panipat.

United Woollen Mills, Amritsar 270 Woollen Spindles, 11 Hand Looms

Verindra Textile Mills, Putlighar, Amritsar.

RAJASTHAN

K J. Textile Mills, Pushkar Road, Ajmer.

K. K. Woollen Namdah Factory Tripolia Bazar, Jaipur City.

UTTAR PRADESH

Allahabad Woollen Mills, Subodarganj, Allahabad.

Bhadohi Textile Industries Ltd., Bhadohi.

Baijnath Bankeybeharilal Woollen Mills, Anwarganj, Kanpur.

Cawnpore Woollen Mills, branch of the British India Corporation Ltd., Post Box No 5, Kanpur.

Dayalbagh Textile Mills Ltd, Dayalbagh (Agra), Office- Mill premises.

J. K. Woollen Manufacturers Ltd., Anwarganj, Kanpur, Lessee—Baijnath Bankeybeharilal Woollen Mills, Kanpur.

Kapoor Chand Jain Woollen Mills, Katra Baji Roi, Mirzapur.

Seftone & Co. Ltd., Jubbalpore Road (near Railway Station), Mirzapur.

Shaban Blankets Industries, Bazar Ghosia, P. O. Auira, Dist. Banaras.

Shaikh Shaban & Sons, Bazar Ghosia, P. O. Auira, Banaras.

Standard Carpet Co. Ltd., Ghosia, P. O. Auira, Mirzapur.

U. P. Manufacturers and Suppliers Ltd., Post Box No. 111, Kanpur.

LIST OF MILLS WHICH HAVE STARTED WORKING UNDER THE POST-WAR PLANNED SCHEME

NAME OF MILL & ADDRESS	SPINNING OR COMPOSITE	SPINDLES	LOOMS
Aaron Spg. & Wvg. Co. Ltd., (The) Pappinisseri (N. Malabar)	Composite	11900	—
Adoni Cotton Mills Ltd., (The) Adoni.	Spinning	2000	—
Arati Cotton Mills Ltd., (The) Calcutta.	Composite	6420	204
Asok Textiles Ltd., (The) Alwaye	Spinning	8640	—
Balaram Varma Textile Ltd., Shencottah (S. India)	Spinning	11904	—
Bengal Fine Spg & Wvg. Mills Ltd., Konnagar, West Bengal.	Spinning	13860	—
Buxar Central Jail, Buxar (Bihar)	Spinning	5300	—
Bhagyalaxmi Cotton Mills Ltd., Calcutta.	Spinning	7636	—
Cannanore Spg. & Wvg. Mills Ltd., (The) Cannanore.	Spinning	12000	—
Cavery Spg. & Wvg. Mills Ltd., (The) Pudukkottai.	Spinning	14208	—
Cochin Mahalaxmi Cotton Mills Ltd., (The) Mulakunnathukavu, Trichur.	Spinning	3600	—
D. R. Madhava Krishniya, Bangalore.	Spinning	10000	—
Dawood Mills Ltd., (The) Pudukkottai.	Spinning	4000	—
Dhakeswari Cotton Mills Ltd., (The) Mills No. 3 Damodar, Asansole, West Bengal.	Composite	12000	20
Hemalatha Textiles Ltd., (The) Pedakakani, Dist. Guntur.	Spinning	12000	—
Jagajit Cotton Textile Mills Ltd., (The) Phagwala Dist. Kapurthala, (PEPSU)	Composite	17856	390
Jaipur Spg. & Wvg. Mills Ltd., (The) Jaipur.	Spinning	5000	—
Kadri Mills (CBE) Ltd., (The) Oddarpalayam, Singannallur.	Spinning	19000	—
Kalyan Spg. & Wvg. Mills Ltd., (The) Birati, DUM DUM, 24 Parganas.	Spinning	13128	—

(Continued)

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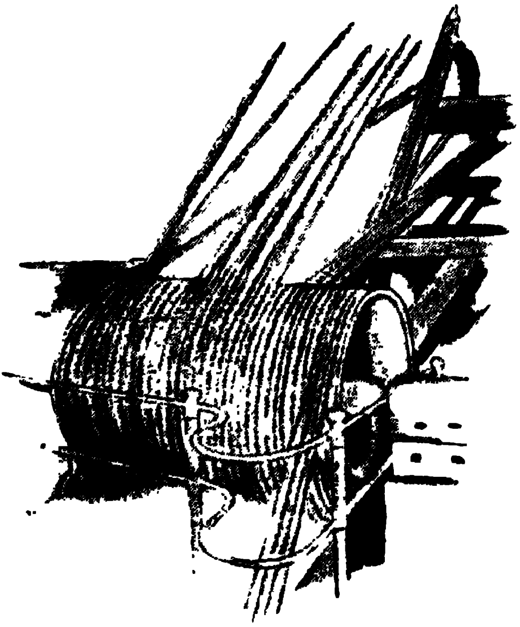

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NAME OF MILL & ADDRESS	SPINNING OR COMPOSITE	SPINDLES	LOOMS
Kapila Textile Mills Ltd., (The) Mysore.	Composite	15184	302
Karur Mills Ltd., Karur.	Spinning	6064	—
Luxminarayan Cotton Mills Ltd., Calcutta.	Spinning	10000	—
Mafatlal Fine Spg. & Wvg. Mills, Navsari.	Spinning	19000	—
Mahendra Mills Ltd., Kalol.	Spinning	5040	—
Mayurbhanj Spg. & Wvg. Mills Ltd., Badripada.	Spinning	10000	—
Modi Spg. & Wvg. Co Ltd., (The) Modinagar.	Composite	20000	504
New India Industries Ltd., Baroda.	Spinning	12000	—
Orissa Textile Mills Ltd., (The) P. O. Ashokapatan, Dt. Cuttack.	Composite	33404	432
Palai Mills Ltd., (The) Walajabad, Dist. Chingleput.	Spinning	13500	—
Pollachi Bagyalakshmi Mills Ltd., (The) Pollachi.	Spinning	8424	—
Premier Mills (CBE) Ltd., Coimbatore.	Spinning	20960	—
Pudukkottai Textiles Ltd., (The) Namenasundram, Pudukkottai.	Composite	11000	—
Rajeswari Mills Ltd., Gudiyattam.	Spinning	6400	—
Rayalaseema Mills Ltd., (The) Rayanagar, Adoni	Spinning	12000	—
Shree Annapurna Cotton Mills Ltd., 214, Cross Street, Calcutta.	Composite	9134	154
Shree Ganeshar Textile Mills Ltd., Devangara (Mysore)	Spinning	17296	—
Shree Kannapiran Mills Ltd., Coimbatore.	Spinning	7004	—
Shree Sadul Textiles Ltd., Sree Ganganagar (Rajasthan)	Composite	13104	300

(*Continued*)

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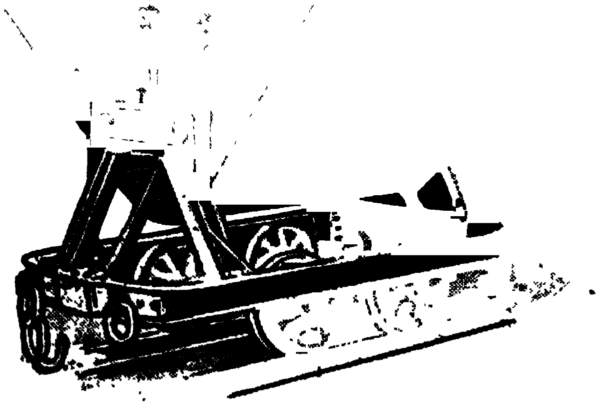

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NAME OF MILL & ADDRESS	SPINNING OR COMPOSITE	SPINDLES	LOOMS
Shree Shankar Textile Mills Ltd., Davangere.	Spinning	16120	—
Sri Ganapathy Mills Ltd., Tirunelveli.	Spinning	6400	—
Sri Karthikeya Mills Ltd., Uppillipalayam, Singanallore Coimbatore.	Spinning	10912	—
Sri Karthikeyan Mills Ltd., Ambasamudram.	Spinning	5816	—
Surat Textile Mills Ltd., (The) Varachha Road, Surat.	Spinning	9800	—
Swatantra Bharat Mills, Delhi.	Composite	25680	607
Tuticorin Spg. & Wvg. Mills Ltd., Tuticorin.	Spinning	6000	—
Vijaya Mohini Mills Ltd., (The) Trivandrum.	Spinning	9360	—
Vanaja Textiles Ltd., (The) Trichur.	Spinning	8400	—
Bhagyalaxmi Cotton Mills, Calcutta.	Spinning	7636	—

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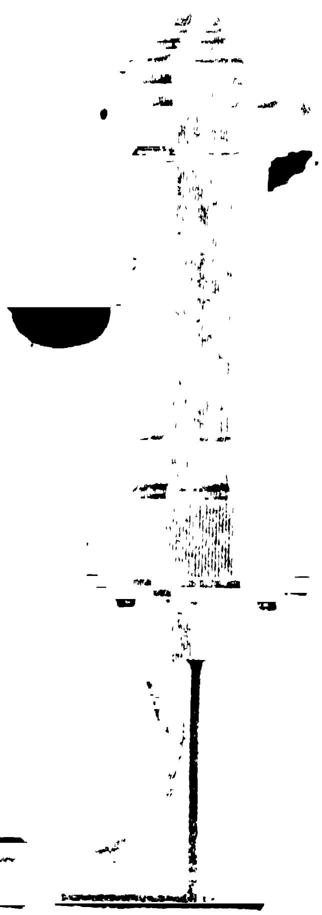

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Bombay 4.

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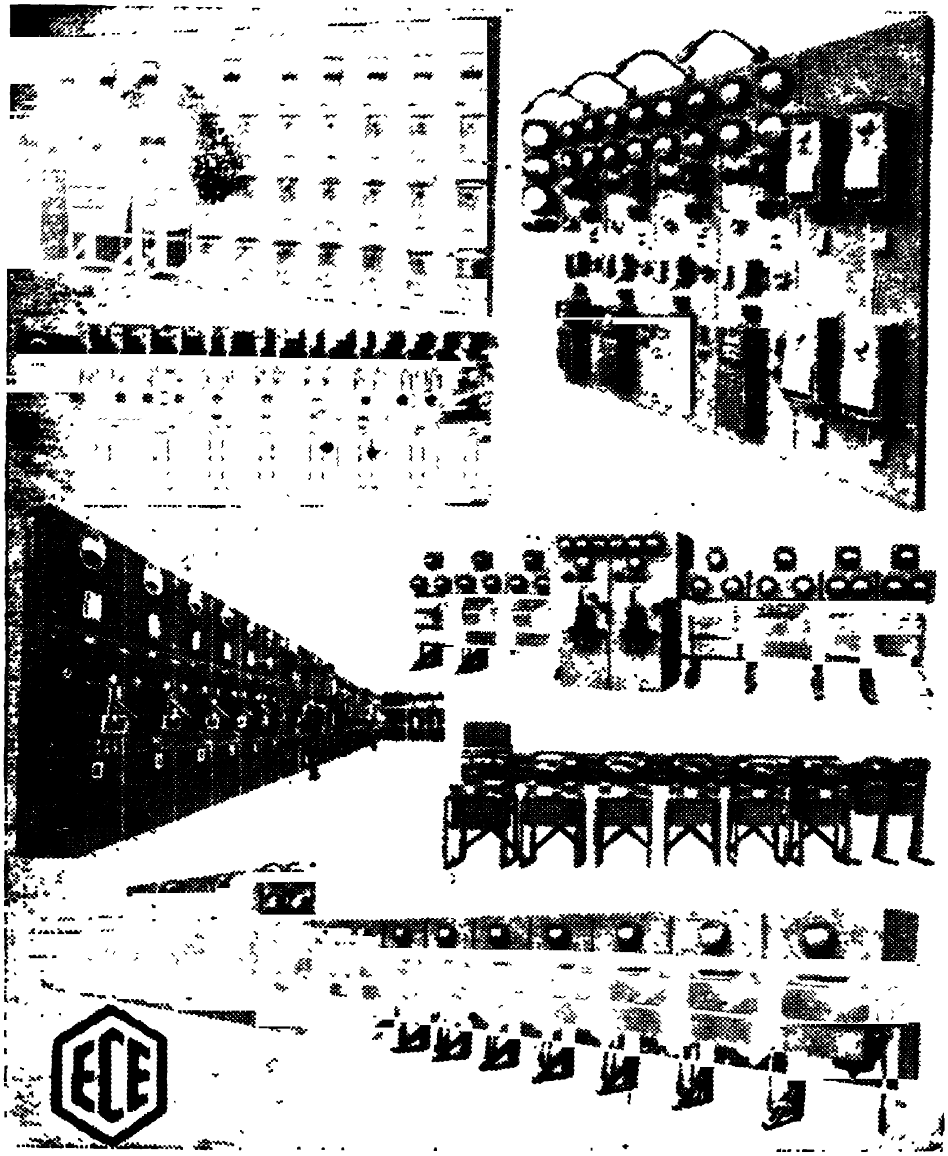

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Lane, Chira Bazar, Bombay 2.

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Machinery & Parts Manufacturers,
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Star Trading Co. Ltd.,
Dyes Chemicals & Stores Importers,
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Stores (India) Ltd,
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Fort, Bombay 1.

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Techno Industrial Co.,
Stores & Machinery Importers,
16, Apollo Street,
Fort, Bombay.

Textile Leather Works Ltd.,
Belting, Buffers & Skins Mfgs.,
Lalgir Chambers, Tamarind Lane,
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Textile Supplies Syndicate (India) Ltd.,
Belting, Pickers, Stores & Machinery
Importers, Kermani Bldg., Sir P. M.
Road, Fort, Bombay.

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Bobbin & Accessories Manufacturers,
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Textile Works Ltd.,
Stores & Machinery Importers,
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Machinery & Rubber Goods Manufrs.,
35, Dalal Street,
Fort, Bombay.

T. Maneklal Ltd.,
Dyes, Chemicals & Stores Importers,
Examiner Press Bldg., Dalal, Street,
Fort, Bombay.

Todi & Co.,
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& Machinery,
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Textool Company Ltd.,
Manufacturers of Textile Machinery,
Post Box No. 221, Coimbatore.

Textile Agencies (India),
42/44, Khatau Bldg., Old Custom
House Road, Fort, Bombay.

Thana Textile Rope Works,
Cotton Rope Manufacturers,
Commission Agents & Merchants,
Lalgir Chambers, 1st Floor,
Tamarind Lane, Fort, Bombay 1.

Trustin Limited,
Stores Merchants,
Yusuf Manzil, 58, Forbes St., Bombay 1.

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Stores & Machinery Importers,
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Victor Trading & Engineering Co.,
Stores, Chemicals & Machinery
Importers,
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Vinodchandra & Co.,
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174, Princess Street, Bombay 2.

Vithaldas Makanji & Sons,
Bobbins & Wooden Stores Manufrs,
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Vasant Industrial & Engineering Works,
470-71, Worli Road, Bombay 18.

Vithal Purshotum & Sons Ltd.,
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Manufacturers,
2nd Khetwadi Lane, Bombay 4.

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Railwaypura, Ahmedabad.

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West End Works,
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Marine Drive, Bombay.

Solarson & Co. Ltd.,
Bobbin & Wooden Stores Manufacturers,
Medows House, Tamarind Lane,
Fort, Bombay.

Jaikishan Madhavlal & Co.,
Dealers in Bobbins of all kinds,
9, Prospect Chambers,
Hornby Road, Fort, Bombay.

Victory Traders,
Stores Merchants,
36, Tamarind Lane,
Fort, Bombay.

B. Richmuller & Co. Ltd.,
Shuttle Manufacturers;
Moghul Lane, Bombay 16.

The Indo Foreign Textile Co.,
Textile Stores Importers,
Bansilal Mansion, Tamarind Lane,
Fort, Bombay.

D. Merwanji & Co.,
Stores Suppliers,
22D, Parsee Bazar Street,
Fort, Bombay.

T. Nelson & Co.,
Leather Goods & Stores Merchants,
5, Hamam Street,
Fort, Bombay.

Parekh Bros.,
Loom Sundries & Stores Merchant,
Karim Chambers,
Hamam Street, Fort, Bombay.

Ormerods (India) Ltd.,
Mill Stores & Textile
Machinery Merchants,
Bank of Baroda Building,
Apollo Street, Fort, Bombay.

ASSOCIATION OF MERCHANTS & MANUFACTURERS OF TEXTILE STORES & MACHINERY, INDIA *(Continuation)*

Nima Trading Co.,
Textile Bobbins & Stores Dealers,
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Hindustan Bobbins & Spool Mfg. Co.,
Bobbin Manufacturers,
Maneklal Road, Navsari.

Hiralal L. Shah,
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of Textile Stores & Machinery,
3rd Floor, Podar Chambers,
Parsee Bazar Street,
Fort, Bombay.

Bengal Engineering Co.,
Manufacturers & Importers
of Textile Stores & Machinery,
14, Netaji Subhas Road, Calcutta.

Ghia Pallonji & Co.,
Dealers in Chemicals,
28, Apollo Street,
Fort, Bombay.

Textile Machinery Crop. Ltd.,
Manufacturers of Textile Machinery,
Asian Bldg., Nicol Road,
Ballard Estate, Fort, Bombay.

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Tamarind Lane, Fort, Bombay.

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AHMEDABAD MFG. & CALICO PTG. CO. LTD.,
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Railwaypura, Ahmedabad

* ACME BOBBIN & SHUTTLES LTD,
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* B RICH MULLER & CO.,
Mugal Lane, Mahim, Bombay-16

* BHARAT BOBBINS LTD,
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Salkia, Howrah.

BHAVANAGAR METAL & WOOD WORKS,
Upperkot, Bhavanagar

* BIPIN INDUSTRIES,
Ahmedabad Gate, Nadiad

BOMBAY BOBBIN FACTORY,
26, Gwalia Tank Road, Bombay.

C M. PATEL & CO.,
Castodia Lane, Kagadapith, Ahmedabad.

DIAMOND BOBBIN FACTORY,
Khanpur Road. Opp: State Transport Office,
Ahmedabad.

DURGA WOOD WORKS,
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DIAMOND WOOD WORKS,
347, Bapty Road, Bombay 8

* DURGA WOOD WORKS,
Limdi Kathiawar

DESAI PATEL BOBBIN WORKS,
Chimodia Road, Billimoria.

EAGLE BOBBINS, Chimodia Ltd
Bilimoria.

EXPRESS BOBBIN WORKS,
Chimodia Road, Bilimoria

GENERAL WOOD & SAW MILLS,
Cannanghat Cross Road, Ghorupdeo, Bombay

GANESH BOBBIN WORKS.
Lahawadi, Bulsar.

GOPAL MILLS CO. LTD.,
Mahatma Gandhi Road, Broach

GANESH INDUSTRIES,
Punalur, (Travancore)

GENERAL INDUSTRIES WORKS,
Shah's Bhuban Surajpole, Boawar.

HIND BOBBIN & INDUSTRIES LTD.,
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Sir P. M Mehta Road, Fort, Bombay

* HINDUSTAN BOBBIN & SPOOL MFG,
Maneklal Road, Navsari.

* H WOOD WORKS,
Bhagal Bazar, Pathapur (Via Kalol)

* INDIA BOBBIN FACTORY,
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Ahmedabad.

* INDIAN BOBBIN CO. LTD,
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* I. B Bobbin Works,
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Jai Hind Bobbin Works,
Station Road, Bhavnagar

Jai Hind Bobbin Works,
Bilimora.

Jai Hind Wooden Industries,
Opp. Vishnu Talkies, Kalol, N. G,

Jay Bharat Bobbin Factory,
Fatehpur Sarkhaj Road,
Ellis Bridge, Ahmedabad

* Jeysh Bobbin Works Ltd,
Kalol, N G.,

J Wood Works,
Limdi, (Kathiawar)

Krishna Bobbin Factory,
Naya Bazar, Bhiwani

Kharadi Mansukhlal Mohanlal,
Pankor Naka, Ahmedabad.

* Laxmi Vijay Bobbin Factory,
Dudheshwar Road, Parmanand Chawl.
Ahmedabad

Lakshmi Sizing Co,
Gadog.

* Mahalaxmi Bobbin Mfg. Co Ltd,
5, Alli Chambers, Dean Lane, Fort, Bombay

Mahendra Bobbin Factory,
Koramba (R.S.) B B & C I Rly

Metro Bobbin Mfg Co,
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Metro Bobbin Mfg. Co,
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Fort, Bombay.

* Mistry Bobbin Works,
Chipwad Nake, Bhailal Road, Bulsar.

* Modern Bobbin Co. Ltd.,
Mahatma Gandhi Road, Bilimora.

M. Shikh Ahmedabad & Sons,
Near Kamgari Gate, Mangalore

* Mafatal K. Patel & Co,
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* Mahalaxmi Industries,
Lati Bazar, Bhavnagar

Modern Textile Wood Works, (The)
Astodia Road, Ahmedabad

Mistry Devchand Premji,
Sutarwad, Bhavnagar

Mahalaxmi Bobbin Industries,
Beawar.

* Nitin Industries,
43, Sadashi Cross Lane, Kandewadi. Bombay

National Textile Wood Works,
Amalsad (B B & C I Rly)

Nathulal Gulabchand,
Diggi St. Beawar

New India Bobbin Works,
Gaiwadi, Girgaum, Bombay 4

Nutah Bobbin Works,
Ramalal Colony, Anil Road, Ahmedabad

National Textile Industries,
38A. Parakhwadi. Girgaum Back Road, Bombay

Prabhat Industries Ltd,
Bhavnagar.

Palitana Industrial Works,
Palitana.

* Panchal Engineering Works,
Nathubhai Road, Bulsar.

LIST OF INDIGENOUS MANUFACTURERS OF BOBBINS (*CONTINUATION*)

Pembroke Industries Ltd.,
Near Power House, Bhavnagar.

Rajanikant Hiralai & Co.,
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Ahmedabad.

Swastik Bobbin Mfg. Co.,
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Fort, Bombay

Shree Krishna Bobbin Mfg. Co Ltd.,
Bulsar.

* Sanghadia Timber Industries,
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* Swastik Timber Industries,
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Bombay-28

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Lati Bazar, Bhavnagar.

* Shree Krishna Textile Works,
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* Shree Sharada Bobbin Works,
Near Ambaji Mata's Mandir, Hathibhaiwadi
Ahmedabad

* Standard Bobbins Ltd.,
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Dadar, Bombay.

* Swatantra Bobbin Co. Ltd.,
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Swasti Wood Works,
Talavadi Road, Bhavnagar

Sri Viswakarma Bobbin Works,
Sutarwad Station Road, Bhavnagar.

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Sarangpur Cotton Mfg Co Ltd,
Bobbin Factory, Outside Raipur Gate,
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Stock Exchange Annexe,
Dalal Street, Fort, Bombay.

* Texmaco Gwalimri Ltd.,
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* The Rampur Timber & Turnery Co Ltd
Jwalanagar, Rampur

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Manacklal Road, Navsari

* Textile Wood & Eng. Works,
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United Bobbin Works,
Pratapnagar, Makakhad, Via Kalol.

* Universal Textile Bobbin Co.,
Madhada (Kathiawar)

Vishwa Vijaya Bobbin Factory,
Astodia Mill Compound, Ahmedabad.

* Victoria Wood Works, (The)
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Khanpur, Ahmedabad

* Vithaldas Makanji & Sons,
Ramchodji St., Navsari

Vishnu Bobbin Factory,
Talavadi Road, Bhavnagar.

Vasudeo Bobbin Works,
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Ahmedabad.

* West End Works,
Vada (Dist. Thana)

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LIST OF INDIGENOUS MANUFACTURERS OF BOBBINS (*CONTINUATION*)

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M/s U S CHOWBEY,
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M/s BOBBIN MANUFACTURERS LTD,
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M/s. ARIADAH BOBBIN FACTORY,
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M/s. N K SOM & CO,
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M/s BOBBIN MANUFACTURING CO,
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M/s. P K BARKE & CO.,
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SOLICITING ENQUIRIES

Calico Printing Mills in India

Name of the Mills.	No of machines & Rollers in Machine.	No of rollers applied
New Era Textile Mills Ltd,	One	Four colours
Panalal Silk Mills, Bombay.	One	Two colours
Abdul Karim Silk Mills, Bombay	One	Two colours
Vasant Vijay Mills, Bombay	Two	1 two colours & 1 four colours
Shree Yamuna Mills Co.. Ltd,	Two	1 one colour & 1 two colours
The Bharat Silk Mills, Kurla	One	Two colours
The Hukumchand Mills, Indor	Two	1 one colour & 1 two colours
Vijay Mills Ltd, Ahmedabad	One	Four colours
The Manekchowk & Ahd. Mfg Co. Ltd.,	One	Two colours
The Ahd. New Textile Mills Co. Ltd.	One	Four colours
The Mahalaxmi Mills Ltd	Two	1 one colour & 1 two colours
The Maharana Mills Ltd	One	Four colours
The Sarangpur Cotton Mfg Co Ltd	Two	1 two colours & 1 four colours
Shree Nivas Cotton Mills	One	Four colours
The Gopal Mills Ltd	One	Two colours
The Ahd. Mfg & Calico Ptg. Works Ltd.,	Two	one four colours & 1 six colours
The Lalbhai Trikamlal Mills	One	Four colours
The Khatau Makanji & Co.	Three	1 two colours, 1 three colours, & 1 four colours
The Vikram Mills Ltd,	One	three colours
The Navjivan Mills Ltd., Kalol	One	Two colours
The Jehangir Vakil Mills	One	Two colours
The Maharaja Kishangarh Mills	Two	1 one colour & 1 two colours
The Rajkumar Mills, Indore	One	Four colours
The Anant Mills Ltd,	One	Two colours
Shree Amarsinghji Mills	One	Two colours
Standard Mills Co Ltd.,	Two	1 three colours & 1 six colours
Bechardas S & W Mills	One	Two colours
The New Commercial Mills	One	Four colours
Kesoram Cotton Mills.	Three	1 one colour, 1 two colours & 1 four colours
Silver Cotton Mills Ltd.	Three	2 colours each
The New China Mills Ltd,	One	Four colours
* J K Cotton Mills Ltd		
The Swadeshi Mills Ltd	Two	1 two colours
The New Shorrock Mills Ltd.	One	Four colours

Calico Printing Factories in India

Name of the Mills	No of machines & Rollers in Machine	No of rollers applied
The Ellichpur Dyg Ptg Works	One	Two colours
The India Calico Ptg Mills	Two	1 two colours & 1 four colours
The New India Dyg & Ptg Works	One	Two colours
* Kamaleshkumar Bachubhai		
Nirmala Dyg Blg & Ptg Works	Three	1 one colour & 2 two colours
H M Motiwala & Co	Two	1 one colour & 1 two colours
Pandya & Shah Ahd	Three	1 one colour & 2 two colours
Maniar Dyg & Ptg Works	One	Three colours
Popular Cloth Ptg Works	One	Two colours
The India Blg Dyg & Ptg. Works	Two	four colours
The Ahd Dyg. & Ptg Ltd	One	Two colours
The Paramount Industries	One	six colours
Takrawala Cloth Ptg Works	One	one colour
Bombay Ptg Blg Mills	One	Two colours
* Mehta Dyg & Ptg		
Chhipe Alerskji Khejuji Dastan.	Two	1 one colour & 1 four colours
* The Eastern Dyg Blg & Calico Ptg Works		
H Nurmohd Cloth Ptg Works	One	six colours
Allahbux Nurmohd Dyer	One	four colours
* Yakub Jamal Vishveshi	——	
* City Ptg Works	——	
* Ahmedji Shabudinji Ponchwals	——	
* Suleman Cloth Ptg Works	——	
* S. N. Sojatwala & Co	——	
* Chippa Jemalji Sultanji	——	
* G S. Padapediwala	——	
* N C. Hajiali & Co	——	
* Allahbux Abdul Rehman & Co.	——	
* Bagadia Cloth Ptg. Works	——	
Arvind Cloth Ptg. Works.	One	Two colours
* Abdul Karim Jemalbhai & Co.	——	

(*Continued*)

(*Continuation*)

Name of the Mills	No. of machines &, Rollers in Machine	No. of rollers applied
* H Nur Mohd	—	
* Bansidhar Cloth Ptg Works	—	
* Mohd. Sharif Suleman	—	
* United Dyg & Ptg. Co.	—	
Gujrat Cloth Ptg Works	One	Two colours
* Goonibhai Karimbhai & Co	—	
Abdul Rehman Haji Nur Mohd	One	Two colours
* Usmanbhai Ibrahim & Co	—	
National Cloth Ptg Works	One	Two colours
* M Jamal & Co	—	
* New Cloth Ptg Works	—	
Ganibhai Nabibhai Katariwala	One	Two colours
* Ebrahim Meesaji Madenalla	—	
* India Textile Ptg Works	—	
* K H Edenwala Cloth Ptg Works	—	
Vasant Cloth Ptg Works	One	Two colours
* Barkotbhai & Co	—	
* Bisara Cloth Ptg Works	—	
Ismail Allerabhji Kalawala	One	Two colours
* Mohamedji & Co	—	
* Chistia Cloth Ptg Works	—	
* Ebrahim Haji Allabbux		
Jemalbhai Mohmedji	Two	Two colours

Particulars of the * Star marked factories were not available.

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Balasinor, Via Sevalia, BBCI Rly.

INDEX TO ADVERTISERS

	Page
Acme Bobbins & Shuttles Ltd.	106
Ahura Chemical Products Ltd.	Onehundredeight
Altex Ltd	iii, iv
Amalgamated Chemicals & Dyestuffs Co. Ltd.	20
Amritlal & Co. Ltd	Twentyeight
Anandram Gajadhar	Sixtytwo
Anglo-Swiss Watch Co.	80
Anil Starch Products Ltd. (The)	64
Aryan Brush Co. Ltd. (The)	120
Asave Mehta & Co.	xiv
Associated Textile Engineers	59
Associated Electrical Industries (India) Ltd	11
Auto Distributors Ltd	Twenty
B. Thanawala & Sons Ltd	Thirtysix
Bangur Bros Ltd.	Sixtytwo
Batliboi & Co.	Eighteen
Basanti Cotton Mills Ltd	114
Bengal Silk Mills Co Ltd	52
Bharat Starch & Chemicals Ltd	40
Bharat Woollen Mills Ltd	Eightytwo
Bharat Rope & Lace Mfg Co	Eightysix
Bharat Bobbins Ltd	118
Birla Bros Ltd	Fiftytwo, Sixtyfour
Birkmyre Brothers Ltd	76
Bradbury Mills Ltd (The)	144
Burhanpur Tapti Mill Ltd (The)	Eightytwo
Burmah-Shell Oil Storage & Distributing Co of India Ltd	Seventy
C C. Wakefield & Co Ltd	xxv
C. Patel & Co	Eightyeight
C. Doctor & Co. Ltd	Thirty
Calico Industrial Engineers	52
Capco Ltd	Fortysix
Ciba Dyes Ltd.	Ninety
Chavannes & Co Ltd	Twelve
Czekoslovak Ceramics	x
Consolidated Mill Supplies Ltd. (The)	Third Cover
Crown Spg. & Mfg. Co. Ltd. (The)	Seventyeight
D. N. Bose's Hosiery Factory	Sixtyeight
Dass Group Ltd.	Six
Dawn Mills Ltd. (The)	144
Dodsal Ltd.	48
Eastern Stores (The)	Eighty
Eastern Stores & Agency	Two
Electric Construction & Equipment Co. Ltd.	Onehundred
Engineer Brothers	Eight
Erskin Heap & Co Ltd.	Second Cover
F. & C. Osler (India) Ltd	76
Fedco Ltd.	Fiftysix
French Dyes & Chemicals (India) Ltd.	146
Goodyear Tyre & Rubber Co. of India Ltd. (The)	79
Ganges Rope Co Ltd	140
Gaekwar Mills Ltd (The)	88
Gannon Dunkerley & Co Ltd	12
Garlick & Co. Ltd.	Fortyfour
Gillanders Arbuthnot & Co. Ltd	99
Greaves Cotton & Crompton Parkinson Ltd.	xxvi
H. D. Nariman Bros.	iv
H M Mehta & Sons Ltd	88
Hastings Mill Ltd	Sixtytwo
Heatly & Gresham Ltd.	xxii
Hindoostan Spg & Wg Mills Co. Ltd (The)	Seventyeight
Hyderabad Handlooms Weavers' Central Co-op Assn Ltd (The)	140
India Electric Works Ltd.	Seventyfour
India Hosiery Factory	146
India Machinery Co Ltd	Six
India Wire Netting Factory	xvi
Indian Cable Co Ltd (The)	44
Indian Malleable Castings Ltd	138
Indian Mfg. Co. Ltd. (The)	Seventyeight
Indian Casablancas High Draft Co. Ltd. (The)	132
Indian Textile Engineers Ltd.	xiii
Indian Wild Barfield Co Ltd.	xxiv
Indo British Trading Bureau	xxi
Industrial & Agricultural Eng. Co. (Bombay) Ltd.	84

Index to Advertisers (continuation)

	Page
Industrial Air Control (I) Ltd	5
Ivan Jones Ltd.	126
J. N. Dass & Co	Ninetytwo
Jenson & Nicholson (India) Ltd	Forty
Jion & Co	Fiftyfour
Jay Shree Textiles Ltd	Fiftytwo
John Paterson & Co (India) Ltd.	32
Jay Engineering Works Ltd (The)	80
Jardine Henderson Ltd	Thirtyfour
J B. Mehta & Company	Thirtysix
Kilburn & Co Ltd	118
King Engineering Co	Eightyeight
Killick Industries Ltd	75
Khatau Makanji Spg & Wvg Co Ltd (The)	17
Kaliandas Jagmohandas & Sons	Fourteen
Kohinoor Mills Co Ltd	75
Kamlesh Corporation	116
Lily Biscuit Co Ltd	Fiftyeight
Lily Barley Mills Ltd	Fiftyeight
Laxmi Cotton Traders	Thirty
M Best Cotton Rope Mfg Co	36
Machinery Manufacturers Corporation Ltd	104
Macneill & Barry Ltd	140
Mahindra & Mahindra Ltd	104
Marsden Spg. & Mfg Co Ltd	27
Mehta Millstores Co	Back Cover, 93 94
Mehta Millsupply Co	93, 94
Mehta Bros & Co.,	93, 94
Modern India Trading Co (The)	Sixtyeight
Mohini Mills Ltd (The)	126
Monogram Mills Co Ltd	27
Motor & Machinery Manufacturers' Ltd	viii
National Hosiery Mills	136
National Insulated Cable Co of India Ltd	xx
National Textile Stores	Ninetysix
National Stores Emporium	Seventytwo
National Carbon Co (India) Ltd	Twentyfour
National Tobacco Co of India Ltd.	Sixtyfour
Navsari Cotton & Silk Mills Ltd (The)	88
Nana[illegible] & Co. Ltd	116
National Electrical Industries Ltd.	Twenty
Nerinco Ltd	xi, xii
Navjeewan Textile Services	xxiii
Orient Paper Mills Ltd	Sixtyfour
Orient Supply Syndicate	Ninety
Oriental Mill Supply Co Ltd. (The)	Fortyfour
Ormerods (India) Ltd	ii
Parry & Co. Ltd	Seventyfour
Philips Electrical Co (India) Ltd	68
Phoenix Mills Ltd (The)	144
Prakash Trading Co (The)	Twentyeight
Rallis India Ltd	100
Ramnarain Sons Ltd	144
Ratansi Morarji Ltd	Six
Roberts, McLean & Co Ltd	xv
Shalimar Rope Works Ltd	Eight
Shalimar Wood Products Co	28
Sheffield Spring & Steel Co	Page Mark
Sizing Materials Co Ltd. (The)	18
Standard Vacuum Oil Company	6
Stewarts & Lloyds of India Ltd	17
Swadeshi Industries Ltd	Sixtytwo
Sree Ram Silk Manufacturing Co	Sixtytwo
Standard Dyes & Chemicals Co	106
Sati Prasanna Bhoumick, M A B L	Seventytwo
Sethna Katrak & Co	Twentyfour
Star Textile Eng Works Ltd	Twelve
Sardesai Brothers Ltd	Thirtyfour
Tide Water Oil Co (India) Ltd	60
Textile Machinery Corporation Ltd (The)	130
Texind Corporation Ltd	xvii
Textile Supplies Syndicate (I) Ltd	xviii
Thackersey Mooljee & Co	Seventyeight
Textile Store Dealers Ltd.	Onehundredten
U N Dhur & Sons Ltd	Onehundredten
Vithaldas Makanji & Sons	120
Volkart Brothers	vi
W H. Brady & Co Ltd	108
W. T Henley's Telegraph Works Co Ltd.	32
Williamsons (India) Ltd.	99
Western India Spg & Mfg Co Ltd. (The)	Seventyeight

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